

CONTENTS

For January, 1936

Side Glances—

SECTION I—EDUCATIONAL ADMINISTRATION

Looking Forward	9
THE EDITOR looks forward this month toward a new policy in public education. He also considers tendencies in control, a new book by a New Dealer, the English curriculum, freedom of teaching and community forums.	
"Hitler Is the Law"	12
The Nazi challenge to education is ably presented by I. L. KANDEL, professor of education, Teachers College, Columbia University.	
Has State Aid Actually Equalized Educational Opportunity?	16
H. E. AKERLY, assistant superintendent of public schools, Rochester, N. Y., maintains that recent expenditures in aid have not only failed, but have made increasingly difficult any significant progress toward the goal of equality for many years to come.	
Guiding the Guidance Program in Our Smaller Schools	18
The teacher's part in individual development and guidance is outlined by RUTH STRANG, assistant professor of education, Teachers College, Columbia University.	
Tenure Laws in California	21
The chairman of the state tenure committee of the California Teachers Association, E. B. COUCH, briefly sketches personnel legislation.	
Even the Best Mousetrap Needs Organized Publicity	22
CLYDE R. MILLER of Columbia, an authority on school publicity, bemoans the fact that so many surveys and researches produce no results because the findings never reach the publics concerned.	
Time Tables	23
Sixty-three school systems tell how much time they allotted to elementary school subjects in 1934-1935. GEORGE C. KYTE, professor of education, University of California, and ROBERT H. LEWIS, a graduate student, are the joint authors of the study reported.	
Finds English Grammar of No Benefit to Pupils of Foreign Language	25
The principal of the high school at East Aurora, N. Y., JOSEPH E. BARBER, tells of an experiment in the effect of a study in English grammar upon the grades earned in a foreign language.	
St. Louis—A City Devoted to Education	26
SUPT. HENRY J. GERLING tells visitors at the coming Department of Superintendence meeting what to look for in St. Louis and its schools.	
Cumulative Sick-Leave Plan Is Successful	30
Denver's sick-leave provisions for teachers are described by A. L. THRELKELD, superintendent of schools.	

"WHY always be blue?" Our interrogator was not questioning our mental state but the color used on the cover of *The NATION'S SCHOOLS*.

When we had time to think it over, we decided he was right. Why always be blue, when there is such variety of color from which to choose? Also, would not a fresh note of timeliness with each new issue be welcome to our subscribers?

Outside opinion was sought. Faber Birren, a colorist by profession and well known as a contributor to such periodicals as *The School Arts Magazine* and *Everyday Art and Design*, was asked to create six unusual color tones especially for *The NATION'S SCHOOLS*.

According to Mr. Birren, these colors, a soft red, jade, brown, olive, blue and old gold, all suggest a modern refinement well adapted to the school field. Technically, these colors have a uniform softness and "value." They are rich rather than brilliant.

The first, turquoise, makes its appearance with this issue. It will also appear in July. Brown will identify February and August; blue, March and September; green, April and October; rose, May and November; gold, June and December.

HEADLINER

for February will be the story of Cranbrook School, boarding and day school for boys near Detroit, written by the new executive secretary of the Cranbrook Foundation, William A. Frayer.

WE MUST stop crippling our children by trying to make them fit into the past century pattern, warns Walter N. Polakov, industrial diagnostician, and author of "Age of

Published monthly by The NATION'S SCHOOLS PUBLISHING CO., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

CONTENTS

Power" and "Man and His Affairs," whose article on technology and education will be a feature of the next issue.

Skilled artisans are less in demand, but the need for all-round intelligent men in industry and service occupations is widening daily. The school must provide men capable of sustained attention. Automatic machines of today can do nearly everything but think. Thinking, observing, reasoning and correcting become the duties of the men behind the machines, Mr. Polakov contends.

A HEALTH and physical education plan that involves the interest of everyone connected with the school system will be described in the next issue by Ruth E. Lins. The set-up at Rockford, Ill., to be outlined by the supervisor, has four divisions—school buildings and grounds, health service, health instruction, physical education.

C LASS size does make a difference, finds H. Leigh Baker of the psychology department, Simmons College. He will present next month a study made in five Connecticut high schools, where it was found that teachers of smaller classes had greater knowledge and understanding of their pupils and thus could teach more effectively.

"BETTER Plant Practices"—that is the title of a monthly page of small practical items such as appear in this issue on page 54. The forerunner of this page was captioned "Better School Practices," and with the word "school" in the title the contributions had a way of veering more and more toward the curriculum or subjects already well covered.

Now with a new title the page is more clearly defined. It becomes a clearing house for ideas on school maintenance—your ideas and the other man's ideas.

The contributions of business managers, superintendents of buildings and grounds, and custodians are invited, along with the always welcome principals and superintendents. What the latter submit for this particular page, however, must be unadulterated plant, we are warning them.

- I Am a School Board Member..... 31
Being the intimate confessions of a puzzled business man, who prefers to write anonymously.
- Better Budgets—III Administration of the Budget..... 33
The concluding article of the series on school budgetary procedure by WALTER C. REUSSER, professor of education, University of Wyoming.
- Court Rulings on Consolidation and Pupil Transportation..... 35
Recent advances in consolidation and transportation are enumerated by M. M. CHAMBERS, specialist in school law and staff member of the American Youth Commission, Washington, D. C.
- Local Word Book Reduces Need for Teacher-Help in Early Grades. 37
The supervisor of language for the board of education, Hamtramck, Mich., GARNETTE WATTERS, tells of a plan employed in the selection of a writing, speaking and reading vocabulary for first and second grade children.
- Michigan Teachers Reorganize..... 39
The editor of the *Michigan Education Journal*, ARTHUR H. RICE, lists several innovations in the structural pattern of a state educational association.
- Happy to Say..... 40
Here is our page of WILLIAM McANDREW aphorisms minus the old script signature which irritated the author as well as several of our readers.

SECTION II—THE SCHOOL PLANT

- Jamestown High School, Jamestown, N. Y. 41
A view of the new school plant recently completed by BECK AND TINKHAM, Jamestown architects.
- Utility Typifies Modern School Equipment..... 42
No pains were spared in making the new building of Jamestown High School adaptable to the needs of an industrial city. GEORGE A. PERSELL, superintendent of schools, describes building and equipment.
- Setting the Small Auditorium Stage..... 47
The part that the school auditorium plays in a growing community with an elementary school population of 350 pupils is analyzed by T. RYLAND SANFORD, JR., superintendent of Warwick and York County schools, Denbigh, Va.
- A Plan for Planting..... 50
NORMAN A. MORRIS, assistant professor of landscape architecture, Iowa State College, writes a practical article on school planting especially pointed at the Middle Western climatic conditions.
- Cooks in the Making..... 55
The Gary plan of having domestic science pupils help with the school lunches is described both as it applies to small and large schools by ELIZABETH AMES, director of science and arts in the public schools of Gary, Ind.
- Better Plant Practices..... 54
- News in Review..... 62
- Regional News 65
- Private Schools 66
- Coming Meetings 66
- Visual Education 72
- Radio Programs 74
- Notes for Buyers..... 78
- The Bookshelf 80



FREE BOOKLET TELLS HOW TO GET BEST RESULTS FROM SCHOOL PAPERS

Now, more than ever before, executives and teachers are turning to the school paper as a helpful instrument in the conduct of school affairs. And they find the most effective production method is the Mimeograph Process. Among the advantages of a well-edited publication are: (1) molding of public opinion favorable to the school program, (2) enlistment of added support for school activities, (3) raising of *esprit de corps* in the student body, (4) providing an ideal medium for preliminary training in journalism. Attractive illustrated papers are produced quickly, easily, and at low cost by the Mimeograph Process. Whether or not you are now using this fine tool of education, you will be interested in reading our informative booklet, "How to Publish a School Paper." Now being forwarded to teachers and executives without charge. Address A. B. Dick Company, Chicago.

Don't miss this booklet. Detailed procedure, thoughtfully arranged, for all operations in publishing a school paper, is clearly set forth in a handsome brochure which is yours for the asking. Address Educational Department, A. B. Dick Company, Chicago.

M I M E O G R A P H



The NATION'S SCHOOLS

ARTHUR B. MOEHLMAN, *Editor*
RAYMOND P. SLOAN, *Managing Editor*

THE EDITORIAL BOARD

<i>Social Interpretation</i>	<i>Administration</i>	<i>Instruction</i>
FRANK CODY Detroit Public Schools	EDWIN C. BROOME Philadelphia Public Schools	STUART A. COURTIS University of Michigan
WORTH MCCLURE Seattle Public Schools	J. CAYCE MORRISON Department of Education, New York	A. L. THRELKELD Denver, Colo.
<i>Textbooks, Supplies and Equipment</i>	<i>Child Accounting</i>	
JAMES B. EDMONSON University of Michigan	ARCH O. HECK Ohio State University	
BEN G. GRAHAM Pittsburgh Public Schools	A. J. STODDARD Providence Public Schools	
<i>Personnel Management</i>	<i>Finance</i>	<i>The School Plant</i>
A. H. EDGERTON University of Wisconsin	PAUL R. MORT Columbia University	E. T. PETERSON University of Iowa
PAUL C. STETSON Indianapolis Public Schools	FLETCHER HARPER SWIFT University of California	FRANK G. PICKELL Montclair, N. J.
<i>Rural Education</i>	<i>State Education</i>	
JULIAN E. BUTTERWORTH Cornell University	SIDNEY B. HALL State Superintendent, Virginia	
HELEN HEFFERNAN Department of Education, California	FRANK PIERREPONT GRAVES Commissioner of Education, New York	

THE EDITORIAL CONSULTANTS

HOMER W. ANDERSON Omaha Public Schools	LEIGH R. GIGNILLIAT Culver Military Academy	CLYDE R. MILLER Columbia University
FRED C. AYER University of Texas	WILLARD E. GIVENS Secretary, National Education Association	JOHN K. NORTON Columbia University
ALICE BARROWS U. S. Board of Education	CHARLES B. GLENN Birmingham Public Schools	E. E. OBERHOLTZER Houston Public Schools
WILLARD W. BEATTY Bronxville Public Schools	THOMAS W. GOSLING Director, Junior Red Cross	PAUL C. PACKER University of Iowa
CHARLES SCOTT BERRY Ohio State University	REV. JOSEPH GRADY Aquinas High School, Rochester, N. Y.	MILTON C. POTTER Milwaukee Public Schools
BOYD H. BODE Ohio State University	FRANCIS B. HAAS State Teachers College, Bloomsburg, Pa.	CARROLL R. REED Minneapolis Public Schools
MARY DEGARMO BRYAN Columbia University	W. W. HAGGARD Joliet Township Schools	LESTER B. ROGERS University of Southern California
A. R. CLIFTON Los Angeles County Schools	RAY L. HAMON George Peabody College	H. W. SCHMIDT Wisconsin State Department
NORMAN R. CROZIER Dallas Public Schools	E. C. HARTWELL Buffalo Public Schools	CHARLES L. SPAIN Detroit Public Schools
CALVIN O. DAVIS University of Michigan	T. C. HOLY Ohio State University	JAMES M. SPINNING Rochester Public Schools
WALTER C. EELLS Leland Stanford University	W. HARDIN HUGHES Pasadena Public Schools	JOHN W. STUDEBAKER U. S. Commissioner of Education
FRED ENGELHARDT University of Minnesota	FRANK A. JENSEN LaSalle-Peru Township High School and Junior College	WILLIS A. SUTTON Atlanta Public Schools
A. CLINE FLORA Columbia Public Schools	ROBINSON G. JONES Cleveland Public Schools	W. W. THEISEN Milwaukee Public Schools
JOHN G. FOWLKES University of Wisconsin	W. W. KEMP University of California	VINAL H. TIBBETTS Manhasset Public Schools
HARRY S. GANDERS Syracuse University	HARRY D. KITSON Columbia University	WILLIS L. UHL University of Washington
F. M. GARVER University of Pennsylvania	GEORGE C. KYTE University of California	DAVID E. WEGLEIN Baltimore Public Schools

LOOKING FORWARD

Toward a New Policy

IF A definite program or policy for public education is expected of the federal government, the first essential must be the unification of the profession in terms of one program. The federal government during the current administration has not been indifferent or hostile to public education. The size of the emergency appropriation definitely precludes that point of view. The fact is that educationists consistently refuse to see that the federal government, regardless of party or personnel, is essentially political and will continue to remain so. A political administration is naturally a realistic one.

The real reason for the administration's attitude toward public education lies not in lack of sympathy for public education but in its inability to find a united profession and its objection to emotionalized pressure-activities to secure certain objectives. To the representatives of the people much of the proposed program smacked strongly of unctious selfish economic improvement without additional value to the people. The programs of the minority professional groups did not present a definite policy for improvement and essential administrative reform but insisted on special aids to be granted in a specific way, which would merely prolong traditional administrative inadequacy.

Since the states were not united in favor of a single program, no definite public opinion was created within these political subdivisions through education of the people to possible needs. Without fundamental local support, the plan fell flat. There were also definite implications concerning the principle of undivided school support that made a positive program somewhat dangerous.

If anything is expected of the federal government during the next few years, it will be necessary to develop a united front on the part of the educationists by states for a single platform. Only as this pressure is felt by the people's representatives within each state will it be at all possible to secure results. Little heed will be paid to the competing minority groups with lobbies at Washington.

For purposes of discussion and attempts to secure unification of educational needs, *The Nation's Schools* suggests some simple policies around which the profession can rally by states. Leadership in the development

of unification through state agencies may be properly exercised by the United States Commissioner of Education. These policies, fundamental to maintaining the proper relationship between state and federal governments, include the following:

1. Public education is and shall remain a state function kept close to the people through popular control to ensure social safety and the maintenance of the democratic tradition.

2. The federal government shall maintain its traditional interest in the well being of public education by offering aid on a leadership and stimulation basis without any attempt at direct control through special legislation or indirect control through fiscal subventions.

3. The federal government is interested in the progressive improvement of public education and shall therefore offer fiscal aids for both research and long-range planning. All of these aids are to be made directly to state departments of public instruction and are to be expended under state direction and control.

4. The federal government shall offer definite and necessary assistance to the reorganization of local administrative units by making annual subvention of not more than \$500,000,000 annually for grants for new school plants and for the renovation of existing plants upon the basis of improved and enlarged administrative areas.

5. All federal emergency educational activities shall be immediately transferred to the direct administrative control of the state departments of public instruction both with respect to fiscal and administrative control. Duplicate federal organization within states shall be discontinued.

6. In providing for special and emergency educational activities, preference shall be given to essential and fundamental need.

Tendencies in Control

DEFINITE statements of what will happen presupposes prophetic vision. No one is capable of foretelling exactly what will take place in education during the next decade. If we assume a continuation of our traditional pattern of social organization and that changes will be evolutionary in character, there are certain broad tendencies observable for prognostication. Changes in public school control will tend to manifest

themselves separately but progressively in the major fields of organization, program, plant, personnel and finance.

Changes will be made in the administrative organization but these will be technical instead of basic. The basic form of school organization, the independent school state, strengthened and with enlargements, will continue. The traditional district administrative system will be replaced by larger and broader organization. The present multiplicity of school districts will be molded into four types: the metropolitan, the natural sociologic and economic community, the county, and the region. These new types will permit natural flexibility in meeting population, geographic and economic needs. In general, there will be a tendency to keep these new districts distinct from parallel political areas to protect the integrity of the school state.

State control will be more specifically limited to planning the educational program, furnishing direction, leadership and appraisal. The more efficient and larger district units will have a relatively larger amount of administrative freedom.

There will be a greater tendency toward control by the State in matters pertaining to the general educational program with special emphasis on the curriculum. Development of wider objectives, enrichment of the offering, provision for regional specialization and more objective appraisal of instructional results are definitely indicated. The wider use of the state appraisal power will have a definite effect on local educational policy. It is to be hoped that this appraisal will confine itself to the broader purposes and objectives and not become hopelessly involved in the mechanics of methodology.

There will be much more rigid state control of personnel in the fields of selection, standards, programs and certification requirements. Certification will be centered in nonpartisan state boards of education and numbers will be rather rigidly related to active demand. Increase in spatial flexibility through larger districts will make tenure during efficient service possible. State contracts will protect teacher personnel from exploitation by boards of education, religious, economic or social interests. The right of appeal to a state board of review by teachers will also furnish additional protection.

Since depression conditions have definitely indicated the use of credit as a device for stabilizing current expense budgets during future depressions, the state will more and more become involved in the direct financing of the school plant from direct taxation instead of through borrowing. Paying for the plant will mean a much greater control by the state over the location, planning and construction of school plants. There will still be considerable local freedom in educational designing and competent metropolitan areas will probably have considerable freedom.

As our state and federal tax systems are progressively adjusted to modern conditions and requirements, it is

obvious that the state will support to a much larger extent than heretofore the direct expense of public education. The state's share will range from 40 to 80 per cent depending on the type of organization and the economic condition of the particular state. As state subvention is enlarged there will be a general increase toward centralized control through the power of appraisal and the subsequent possibility of inflicting financial penalties. Against this tendency will be balanced more competent local organization and the tradition of popular control and direction, through the board of education, of the community's educational program within the general statutory framework. A harmonious balance between the extremes of localism and centralized state control will be desirable in the interests of the democratic tradition.

Protection for the People

THE commissioner of education, John W. Studebaker, appearing before the Missouri State Teachers Association, made a special and noteworthy plea for tolerance and for the respect of our agitative liberties so completely essential to the maintenance of the democratic way of life. He made a telling point of the value of "academic freedom." It is just as much the need of the public as it is that of the teaching profession. If any of our agitative liberties, including the freedom of teaching, are suppressed the mass of people are immediately deprived of the right to hear, read and discuss. Without these freedoms there can be no democratic government. Part of the school's work lies in the teaching of the fundamental value of these liberties and part lies in protecting them against aggression by forces outside of the school.

Brass Tacks

DAVID CUSHMAN COYLE, who may be considered one of the conservative New Dealers, has recently published, under the happy title of "Brass Tacks" (National Home Library Foundation, Washington), his plan for the progressive adjustment of our capitalistic system to changing conditions. It is simply written to meet the layman's need.

Coyle builds his plan upon the four-fold thesis that the American people want to earn a decent income, to be assured of a reasonable degree of personal security, to enjoy the advantages of modern technology and still to retain a reasonable amount of personal freedom. "Brass Tacks" tells how these objectives may be achieved by pursuing an evolutionary plan instead of selecting one of the panaceas proposed by either right or left wingers. The book is honestly realistic. It offers no Utopia through Messianic intervention by a theological, industrial, political or academic élite.

Since Coyle is professionally an engineer, his appeal

to the professional political economist will not be great. To those who see in collectivism and complete socialization the only path out of present conditions, the very assumption that the capitalistic plan may endure is immediately an overwhelming challenge. To the reactionary industrialist and banker, particularly the banker, the modifications of current thought and practice will not be immediately acceptable or very palatable. We are neither engineer nor economist and therefore we do not pretend to pass authoritatively and finally upon the ultimate merits of Coyle's program. We do believe that the book is distinctly rational (it follows our traditional pattern) and certainly stimulating. It is therefore quite possible that it possesses real merit. Since, in addition, it is issued at the unusual democratic price of 25 cents for a case-bound copy, we feel it has a double appeal.

Discussion and Fair Play

MANY superintendents and principals are uncertain about the possibilities of adult education on a realistic basis through institutional guidance and direction. Especially are they nervous about the revival of the old-fashioned town meeting as the community forum. Frequent communications indicate that different school districts have had such peculiar experiences that they even doubt the value of the forum except with carefully controlled audiences such as professional and parent-teacher groups. Review of the evidence in these cases indicated that those in charge of the programs made serious tactical errors that could have been avoided by more careful study of the fundamental native pattern.

It is possible to use the community forum as an educational device without danger. Its prototype, the New England town meeting, is definitely a part of the American tradition. Current methodology may be taken from the field of sport, also well rooted in our cultural patterns. The American likes competition and he also likes fair play. He wants to see both teams on the field at the same time, playing against each other instead of fighting against a record or a bogie.

This fact should give the clue to forum directors. All points of view should be presented on any question discussed in this manner before any audience. Whatever the technique of presentation, whether by some form of jury panel or by presentation of an individual viewpoint, subject to discussion and check by other viewpoints, the principal caution to observe is the simultaneous presentation of all viewpoints from the same platform to the same audience. Audience participation, under the direction of a good parliamentarian, is a desirable supplement to the platform leader presentation.

From many standpoints the modified jury panel technique is desirable. By pitting the ultraconservative against the radical, full freedom is allowed, growing out

of controversy, for the progressive development of viewpoints between the ends of the scale. Unless an audience is carefully selected with respect to a single point of view, the general tendency will be to develop as a result of discussion a middle point of view, which may be carefully presented by the chairman or left to the audience for individual summary.

One-sided programs and audiences are bound to cause trouble. In one liberal community last year the authorities sponsored for group discussion only the speakers furnished by the League for Industrial Democracy. These speakers stressed a single point of view. At the close of the series there was considerable discussion among the leaders, including the progressives, as to the fairness of the program. To balance the scales the current year found a town hall program loaded with innuendo, entertainment and fortune telling. It was a perfectly natural reaction to what appeared a violation of the American tradition. Next year this community should be ready for a real discussion program.

The English Curriculum

AFTER several years of studious effort the special curriculum commission of the National Council of Teachers of English has produced its second curricular monograph entitled "An Experience Curriculum in English." (Appleton-Century).

The volume undoubtedly represents much work and conscientious effort on the part of the commission. It indicates earnest desire to provide for continuity and to escape minute compartmentation. As a master pattern it certainly is a break with the past. These are valuable elements. However, if the entire report is considered functionally, it falls far short of the final objectives of a general curriculum in English for public education in the United States.

The psychology underlying its organization is too distinctly behavioristic for general acceptance. Whatever the ultimate contribution of behaviorism to psychology, it cannot be justified as the base for general curriculum building. Language in the curriculum must be considered both as a science (tools) and a fine art. To us the emphasis upon it as a science is much too low and its consideration as a fine art is totally inadequate. The further assumption, by implication, that the school shall not rise above the level of experience seems to be a distinct negation of the principle that the school is a social instrumentality in the development of tastes and standards. Many of the activities considered as worthy school values are merely incidental outside mechanical practices. These defects alone are vital enough to make its acceptance by the teaching profession a dubious procedure.

The Editor



A youths' camp near Munich. The color guard is on duty for a twenty-four-hour period, for what reason Doctor Kandel does not know. Opposite are seen young hikers atop a castle on the Rhine.

By I. L. KANDEL

THE German National Socialist state presents today the most perfect example of the totalitarian concept in politics. Parliamentary government has been set aside; the plebiscites which are held at the will of the *Führer* serve only to prove complete domination over public opinion; there is not even any pretense of consulting the party representatives. "Hitler is the law and will of the people."

Education under such conditions becomes merely a machine to mold the rising generation to this law and will. Nowhere has history furnished a better illustration of the result of a state controlled system of education against which John Stuart Mill

"Hitler Is the Law"

so forcefully warned the English public in the middle of the nineteenth century.

"That the whole or any large part of the education of the people should be in state hands, I go as far as anyone in deprecating. All that has been said of the importance of individuality of character, and diversity in opinions and modes of conduct, involves, as of the same unspeakable importance, diversity of education. A general state education is a mere

contrivance for molding people to be exactly like one another: and as the mold in which it casts them is that which pleases the predominant power in the government whether this be a monarch, a priesthood, an aristocracy, or the majority of the existing generation; in proportion as it is efficient and successful, it establishes a despotism over the mind, leading by natural tendency to one over the body."

*Mill, J. S., *On Liberty and Other Essays*, p. 126. New York: The Macmillan Co., 1926.



German Railroads Information Office

Nazism, Communism and Fascism Challenge Democracies of World

The essence of totalitarianism is the subjection of the individual to the state. Historically it is a concept that appeared with the earliest forms of organized society. It implies the complete negation of the right of the individual to self-determination and his subordination to the will of the group, whatever its nature may be—social, religious, intellectual, economic or political.

The totalitarian state emphasizes duty and self-sacrifice on the part of

the individual and restricts his rights only to those matters that remain after the state has consolidated its own interests. The whole history of mankind, however, represents a series of struggles for emancipating the individual from the thralldom of external forces—from fear and superstition, from servitude, from tyranny and despotism in government, from controls and coercions over his life except to the extent that he is willing to surrender some of his rights

in the interests of the social whole.

On the positive side this struggle has been one for personal freedom, for freedom of opinion, for freedom of expression, for freedom of movement and freedom of action, for equality of opportunity, tolerance, justice.

The reality and significance of this struggle are, however, too often ignored, and the gains that have been made tend to be forgotten because man has not yet reached that perfect state from which all abuses and all defects have been eliminated. Particularly is this true in a critical period such as that through which the world has been passing since 1914. Such a crisis when it is prolonged inevitably leads to hysteria and disillusionment, to skepticism and loss of faith in established institutions, and to an emotional strain that may readily lead men to seek solutions in the new and the untried. Such a crisis furthermore reveals defects of social, political and economic life which in normal times have been either unrecognized except by the few or else ignored.

The totalitarian states that have been created since the World War have not neglected the opportunity of attacking the defects and abuses of the modern democratic states. It looked in 1918 as though the way had been cleared for liberalism and for democracy, despite the Russian revolution of 1917. Today nothing is more certain than that the chief onslaught on all fronts is being made upon liberal and democratic institutions.

The revolutions—whether Communist, Fascist or National Socialist—can only be understood as a direct challenge to those institutions that mankind has struggled for centuries to secure. About this there can be no mistake, for these revolutions have been founded on explicit criticisms of democratic ideals. Democratic forms of government, it is charged, are based on the cult of the individual, and the state has been subordinated to the interests of individuals. The state, it is asserted, has become mere-

ly an agent of the members who make it up and its chief function has come to be the maintenance of a balance between their conflicting interests.

Under such conditions individuals place their own interests before those of the state and become more insistent on their rights than conscious of their duties. Parliamentary government accordingly represents the selfish interests of individuals organized into parties. Amid these conflicts between individual, group or party interests the state cannot carry out a mission or destiny of its own which is something more than the mere sum of the wishes and opinions of its members.

To these criticisms there are no doubt others that may be added. It must be admitted that in some countries which boast of their democratic institutions liberty has degenerated into license and the doctrine of *laissez faire* has been interpreted in ways never intended by the liberal philosophers who originated it.

Government by majority is often a sham and a delusion, since majorities have been manipulated and exploited

by those who place their own interests above the interests of the whole. Graft, corruption and exploitation are uncovered from time to time in local and central governments. The tasks of government have today become so complex that they can no longer be carried on by methods of parliamentary procedure. And among these tasks the most difficult are the provision of economic opportunity and the maintenance of decent standards of living.

Confronted with all these weaknesses and difficulties there are many who are willing to surrender what has already been gained and ready to replace democratic institutions by some form of dictatorship or by one of the political and economic cults that promise immediate salvation for all the ills of the day.

For these there is something attractive in the lure of a planned economy or of government in the hands of experts or of power concentrated under the control of a strong authority. Democracies, they feel, are likely to be inefficient, to blunder, to be devoid of any definite aims; the progress of

liberalism is too slow to meet urgent crises; in the attempt to meet the wishes of large aggregations of voters there is a tendency to compromise, while revolutions, they claim, know no compromise—an assertion that has no foundation in fact.

What such critics fail to do is to familiarize themselves with the operation of those forms of collective, authoritarian or totalitarian governments and to inquire searchingly whether in the interests of an immediate crisis, which is due more to the contemporary anarchy in international affairs, political and economic, than to weakness inherent in the democratic form of government, democracy should be surrendered. Have the institutions of liberalism and democracy failed because of the innate defects of the fundamental principles on which they are based, or because many of these principles have with the lapse of time come to be forgotten?

In the United States certainly democracy has been taken too much for granted and, while lip service has been paid to its ideals, the doctrine of rugged individualism, which in practice has meant the cult of individual and group selfishness, has been allowed to have full sway. Under such circumstances it is not surprising that in education the emphasis has also been placed upon the rights and freedom of the individual and rarely upon his duties and obligations.

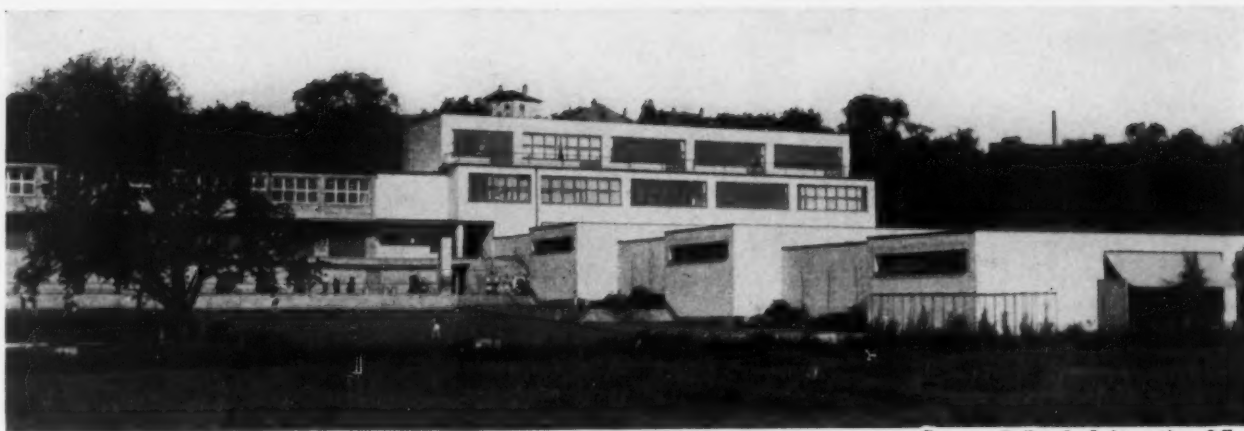
Those who are impressed by the apparent order secured by the totalitarian state, in which the individual seems to surrender himself body and soul to the interests of the group as a whole, in which there is apparent solidarity between all classes of society and between capital and labor, are in real danger of being captivated by the mechanical organization of what looks on the surface like a smooth-running machine, in which all the thinking is done for the masses by one or by a few carefully selected leaders.

Such superficial appearances too readily warp the judgment of the ob-



German Railroads Information Office

Unobstructed sunlight penetrates the classrooms in this modern urban school at Frankfurt-on-Main, Germany.



German Railroads Information Office

This example from Frankfurt of modern school architecture shows the emphasis on fresh air and sunshine.

server and lead him to believe that the serious crises that oppress the world have been surmounted where the individual has completely surrendered to the state. Emotions engendered by economic insecurity may often carry greater weight than calm reflection.

Sacrifices Too Great

Under such conditions there is a real danger that the essential ideals which liberal and democratic institutions connote may too readily be surrendered. Even if the totalitarian state had succeeded in carrying out its promise of economic salvation, there would still remain the question whether independence, tolerance, freedom of thought and free expression of opinion can be sacrificed for a system based on force, hatred, intolerance and coercion.

It is not intended to suggest that democracies have yet attained that perfect state in which political, social and economic security are guaranteed, but imperfect though they may be in practice, they are based on ideals that cannot be readily cast aside.

So far as education is concerned it can be asserted that democracies do not seem to be as conscious of their task as are those states which the recent revolutions have produced. The ideals of democracy were defined so long ago in the English-speaking world that there is a tendency to accept them for granted as much as the air we breathe, resulting in a condition of mind which fails to realize

that it should be the everyday task of the school to inculcate them if they are to be preserved.

The mistake made under the German republic was just this, that it was not realized that a people without a democratic tradition cannot acquire it through a mere change of constitution, and that men may lose their heads through freedom as readily as for it.

Democracy and liberalism are not merely forms of government but ways of life which have to be learned anew by each generation. Nor are they dogmas that can be symbolized by the color of one's shirt.

No Tolerance for Critics

Because of the economic crisis statism and governmental control may be advocated as cures, but the danger is that such intervention by a political authority into one aspect, and a very important aspect, of man's life may flow over into other realms and destroy every vestige of freedom. The suppression of freedom of opinion, of the press and of expression is essential to the stability of the totalitarian state, which cannot tolerate "gossips" or critics. But if discipline, a sense of duty and responsibility, and sacrifice are incompatible with democracy which is intended to guarantee such freedom, then a change has been long overdue.

The making of Nazis is a challenge to the democracies of the world. Here lies the most important educational issue for those peoples who have

adopted democracy as a way of life and a method of government—to meet the challenge thrown out by the revolutionary ideologies, to rediscover the fundamental principles of democracy, to correct its defects and to develop from it ideals that will enrich the life of every individual and make him a better member of society because he is a better individual.

Washington's Educational Legacy

The challenge of Communism, Fascism and Nazism is to discover for democracy that moral equivalent for these ideologies which, while encouraging the free development of the individual, will at the same time set before him objects of social allegiance that will guide his conduct.

There are groups in the United States that with the constitution and the names of the founders of the republic reverently on their lips would seek to repress free discussion, criticism and intellectual freedom. Such groups need to be reminded of the educational legacy left by Washington, who in his farewell address urged the American people to "promote then as an object of primary importance institutions for the general diffusion of knowledge. In proportion as the structure of government gives force to public opinion it is essential that public opinion be enlightened."

If the recent tendencies in German government and education prove anything, it is that enlightenment and the totalitarian state are incompatible.

Has State Aid Actually Equalized Educational Opportunity?

By H. E. AKERLY

IN principle, both socially minded laymen and professional educationists believe in an equal educational opportunity for every child in the land. An opportunity to intone this belief as a credo is seldom neglected. The expression is not mere lip service; it is accompanied by an ardent advocacy of substantial state and federal subventions to assure an equal chance for every child.

A strange thing about this apparent consistency, and one generally overlooked, is the unrealized fact that probably recent expenditures in aid, under the most satisfactory plan yet devised, have not only failed to equalize educational opportunities, but have made them more unequal, and what is more to be regretted, have made increasingly difficult any significant progress toward the goal of equality for years to come.

To quote from a recent authoritative statement* we find that: "Numerous principles, many of them contradictory in nature, have been followed in the application of state aid. The following are the goals which have been more or less confusedly sought in many places: (1) equalization of opportunity; (2) stimulus to local incentive (reward of effort); (3) stimulus to reduction of local taxes; (4) stimulus to full value assessment; (5) stimulus to local reorganization; (6) economy of operation, and (7) efficiency of administration."

Up to about a dozen years ago the generally accepted device used to raise the level of the educational offering was that of stimulus to local

What is the answer to the problem of the rural girl who wants to study stenography when the high school in her district offers only a classical course? Or the boy who is mechanically minded and is enrolled in an academic course? State aid fails them

incentive, or reward of effort, as it was commonly called. "I'll give a dollar if you'll spend two" was the motto of philanthropy in aiding privately supported institutions. When state authorities said to the local educational unit, for every additional teacher you employ we will give you \$400, they followed the same principle. When the federal government says today, if you will build a new school you will receive a grant of 45 per cent of the cost, it is stimulating local incentive.

Inevitably state aid and subventions under this plan went largely to the wealthier communities. The well-to-do districts employed more and better teachers, built more schools and equipped them with libraries, swimming pools and theaters, and stadiums. The poorer districts tried but could not follow at the same pace. Under this plan of state aid the educational level was raised but the inequalities in educational opportunities were accentuated.

Just over a decade ago the principle of equalization of opportunity came to the fore largely through the discovery that Prof. Paul Mort's plan for distributing state funds in aid of education would apparently solve several vexing problems in New York State. The first and most urgent was the distress of the seven

largest cities whose expenditures were then curtailed by a constitutional tax limit which had just become operative. Public expenditures had mounted because of postwar increases in personnel costs, the largest of which were in the teachers' salary roll. The broader but less immediate problems were: to devise a plan for statewide relief from excessive real property taxes; to quiet general dissatisfaction arising from the existing inequalities in educational opportunity, and to equalize the tax burden in the school districts of the state.

Under the Mort thesis state aid paid to the so-called "tax limit" cities from funds raised from other than real estate taxation would relieve the urban real estate owner, and permit the cities to carry on their normal functions within the constitutional limitation. If the state aid were distributed so that the poorer community received for each child in attendance proportionately more than the wealthier community, it appeared that not only would there be statewide tax relief for real estate and specific relief for the so-called "tax limit" cities but, in addition, educational opportunities and school tax rates would be equalized. The basic educational purpose of this new plan was to provide equality of opportunity for every child in the state, and

*Tax Policy League, *Taxbits*, Vol. II, No. 10, p. 5.

the basic economic purpose was to equalize the tax burden. The plan was adopted. What has happened in the intervening decade?

In general, the distribution of large sums under the new plan of state aid afforded substantial relief for real estate both in cities and in rural areas, and, specifically, the embarrassed cities were enabled to keep their expenditures within the constitutional limitation. These are achievements of the highest order and they reflect the merit inherent in the plan. Granting that, how about the inequalities in educational opportunities and school taxes? Not only has equality of educational opportunity not been achieved, but most disconcerting is the fact that inequalities have actually become greater.

School taxes now create more nearly equal burdens, but not to the extent desired even though the state has paid over 85 per cent of school costs in some communities.

What has happened in the "tax limit" cities, population over 100,000, may be illustrated by the schools in Rochester, the third largest city.

In 1925 state aid paid for 14.06 per cent of the cost of public education in Rochester. Nine years later it paid for 27.78 per cent. During the same period the tax rate for

TABLE I—STATE AID IN ROCHESTER

	Total Receipts*	State Aid	Per Cent	Tax Rate Mills*
1925	\$9,517,350	\$1,338,161	14.06	13.74
1930	9,840,622	2,028,891	20.62	10.88
1934	8,413,220	2,336,913	27.78	8.77

*Board of Education.

schools dropped from 13.74 mills to 8.77 mills. While tax reduction has resulted from decreased expenditures, increased state aid has been a major factor.

To show what has happened to school taxes throughout the state the following information in Table II is offered. The communities were selected at random. In each subdivision two are village districts and two are city districts. The population figures are indicated in parentheses.

While the general tendency has

been toward a lower local tax burden, improvement in the large and well administered district than in the smaller and less able district. We have also failed to recognize a principle of government, that difficulties in administering subventions increase directly with the number of units affected. Just so long, therefore, as

The remaining and most vital aspect of our general problem is that concerned with equality of opportunity. What has happened to educational opportunities in the years during which state aid has not only been increased by tens of millions, but has been distributed under an intelligent plan and in full recognition of the principle of equality of opportunity? Briefly, the average level of the educational offering has been raised just as it was raised during the years when state subventions were granted upon the principle of reward of effort. Improvement is, however, more widespread under the new plan than under the old.

Inequalities in opportunity are not only as great as in 1925, but in the eyes of competent observers they are greater. The wide divergence in the offerings of a dozen years ago in the elementary schools has not increased to a marked extent, and where central consolidated school districts have been created the opportunities for the rural child have increased more rapidly than have those for the average city child.

In the secondary school field the story is different. For the average high school pupil in rural areas no development has kept pace with the increased offerings of the newly constructed technical or industrial high school, continuation school and evening high school.

After ten years, during which state aid has mounted to \$117,000,000 a year, there is still no way out for these children. They are at the mercy of the district trustee or local board. They are comparatively fortunate in one sense; the board may, if it desires, pay their tuition in a city school. But in more rural areas they are forgotten children.

The distribution of large sums of money to the 8,598 school districts of the state has resulted in more rapid

TABLE II

		Tax Rate	
		on Assessed Value	on Full Value
Low Tax Rates:			
Village	— 1934	\$ 5.00	\$ 4.85
(533)	1924	13.00	9.75
Village	— 1934	4.50	4.41
(699)	1924	14.39	8.92
City	— 1934	5.68	4.60
(21,276)	1924	10.10	9.80
City	— 1934	4.34	4.34
(36,652)	1924	11.44	8.91
High Tax Rates:			
Village	— 1934	40.00	20.00
(470)	1924	27.50	12.65
Village	— 1934	40.00	30.00
(583)	1924	45.00	15.30
City	— 1934	20.50	11.28
(34,817)	1924	19.73	9.87
City	— 1934	15.26	5.49
(13,349)	1924	23.98	10.79

we cling to the school district as our administrative unit, we put off the day of equal opportunity. Just so long as the accidental location of a district school near a railroad or industrial plant decreases the tax rate to a nominal figure, or the location of a school in a submarginal agricultural area means a high tax or a poor school, we shall have no equality in taxation.

Our leaders in education have agreed that "the way is clear for the American people to get more and better education for their money if they want to do so. The result cannot be obtained without a reorganization of local schools and units of administration."

It is obvious that we once again must modify the principle under which state aid is to be distributed, if we are even remotely to approach our goal of equality of opportunity for the child and equal treatment for the taxpayer. The new principle might well retain the present principle of distribution of aid in proportion to need. But it should be modified in the light of experience so as to include recognition of the principle of "stimulus to local reorganization" with its corollaries "stimulus to economy of operation" and to "efficiency of administration."

Guiding the Guidance Program in Our Smaller Schools

By RUTH STRANG

EVERY teacher does personnel work, *i.e.* work with individuals. He may do it well or poorly, but he cannot fail to have some influence on the choices and development of the pupils with whom he comes in contact.

The professionally alert teacher, therefore, asks: "How can I do better this work with individuals which I now do inadequately?" The progressive principal and superintendent ask: "How can we give teachers an awareness of the needs and capacities of pupils, and how can we help them to acquire the knowledge and skill to work more effectively with individuals?"

Both teacher and specialist are essential in an adequate guidance program. There is no one in the school who has so good an opportunity as the teacher to "learn" individual pupils, to observe them so many hours a day, and to adjust the school situation to their needs and capacities. A genuine and intelligent interest in the pupil on the part of teachers is essential to effective personnel work.

A department of guidance set apart from the instructional staff of the school is predisposed to failure. On the other hand, specialists who have time, training and personal qualifications for their work also are an integral part of the ideal guidance program. Experts in vocational guidance, psychologic counseling,

home visiting, health and social guidance, are needed to perform functions for which teachers have neither the time nor the training. These experts in personnel administration enlighten, cooperate with and relieve the teaching staff. They have an important function in interpreting guidance to the teachers, and in giving them some in-service training in work with individuals.

The teacher, in his turn, can discover individuals who need a more thorough and scientific study than he is equipped to give. These cases he can refer to the dean, psychologist, visiting teacher, vocational guidance expert or guidance agency in the community. The teacher can assist specialists by supplying them with information about the pupil. Frequently, a joint conference of teacher and specialist is called. Such a conference is an education to the teacher

in methods of work with individuals. The teacher is often the person who can best make the environmental adjustments suggested by the specialist.

In schools having an enrollment of from 200 to 500 pupils, specialists are seldom employed. Whatever guidance is offered is given by teachers and principals. The guidance responsibilities of the principal tend to decrease as the size of the school increases.

In spite of lack of funds or lack of special facilities, the small school may nevertheless have an effective guidance program. The first requisite is leadership. Usually, the superintendent, principal, vice principal or dean of girls is in charge of the guidance program. It is essential that the coordinator of the work with individuals vision the program as a whole, be able to inspire



Frederick, on the opposite page, is perplexed. The right teacher can give him aid at the psychological moment. To the right, a party committee is in session, always an opportunity for effective social guidance. Below, the teacher is helping pupils to develop a discussion technique.

and instruct his teachers, and be himself able to work successfully with individuals.

The first task of the principal or other coordinator of the guidance program is to develop in his staff the personnel point of view. Principals frequently ask: "What is the personnel point of view?" and "How can this attitude on the part of teachers be developed?"

The chief constituents of the personnel point of view are the following:

1. A genuine interest in the individual pupil.
2. An intelligent understanding of the individual in his environment.
3. A recognition of all aspects of the individual, whether physical,

mental, emotional, moral and social.

4. A focusing of attention on what the boy or girl may become—viewing the pupils as a bundle of possibilities.

5. A desire to help the individual to develop his special abilities and capacities for growth.

The second question: "How can this attitude on the part of teachers be developed?" is more difficult to answer. A study might well be made

of teachers who already have this point of view in order to ascertain, if possible, how they developed this attitude. It is probably part of a genial personality. It is also undoubtedly fostered by participation in personnel work.

To confer with others concerning a particular pupil, to take responsibility for a club or social event, or to collect local information concerning vocational opportunities enhances interest in the guidance program. This interest may be intensified and more clearly defined by faculty discussions and by the reading of books and articles on personnel work and by taking courses in individual development and guidance.

Although the responsibility for the personnel or guidance program in the small high school rests chiefly on the principal and interested members of the staff, every teacher in the school should have not only the personnel point of view but also an understanding of the program as a whole. The personnel functions of the teacher may be classified under four headings: (1) the control of the environment with reference to the growth of individuals; (2) the discovery of the abilities, capacity and needs of each pupil; (3) the counseling of pupils,



and (4) the leadership of group activities.

The first of these functions involves making the school environment conducive to the best development of each pupil. Changes can frequently be made in the environment which produce desirable modifications of the behavior of the individual. It is a common experience to find behavior difficulties disappear when a boy or girl changes from a home to a camp environment. Transferring a pupil from one teacher to another sometimes effects marked improvement in his scholarship and conduct.

Teacher Influences

There are many influences which the teacher can bring to bear upon the optimum development of the pupil, such as the curriculum, hygienic conditions of the classroom, a wholesome emotional atmosphere, methods of instruction conducive to individual achievement, good companions and recreational opportunities.

The intellectual aspects should be especially emphasized because in these the subject-matter teacher plays the strategic part. If the work is either too easy or too difficult, the pupils lose interest and fail to concentrate their attention on the work. The beneficial effects of a challenging task within the capacity of the individual cannot be overestimated. Such a task arouses singleness of purpose, results in the mobilization of the individual's powers and spurs him on to more efficient habits of reading and study. This function of the teacher is closely connected with skill in instruction. The teacher who does effective personnel work must first of all be skilled in teaching his subject.

The second personnel function of the teacher is basic to the first. In order to adapt instruction to the individual, it is necessary to know his capacities, interests and needs. One of the most important items of information is his previous school record. An equally significant item is his general intelligence.

Intelligence testing is best done by a bona fide psychologist in the school, who is not only expert in the administering and scoring of tests but can also interpret the results in the light of psychologic theory and all the other information available about the individual pupil. Next best is a testing program carried out by a central psychologic office or agency which scores tests, tabulates the results and sends them to the school.

The testing program carried on by the teachers themselves has many possibilities of errors. Whatever the teacher's relation to the results of standardized tests, he should be convinced of three fundamental facts: (1) that a given test measures only one aspect of the personality; (2) that the results should be interpreted in the light of other facts known about the pupil, and (3) that no important decision should be based on the results of a single test. The teacher may supplement test results with valuable impressionistic information about pupils obtained through observation in class and in outside activities, as well as through interviews, home visits and diary records written by the pupils.

Keeping Records

The modified and shortened cumulative record of the American Council on Education provides a systematic form for recording information about the individual over a period of years. A teacher possessing such records can see at a glance significant trends in the personality of each pupil. On the basis of this knowledge, the teacher can adjust the work to the child's capacity and needs. The teacher may adapt this or some other form of cumulative record to the needs of the local situation.

The third major personnel function of the teacher is the individual counseling of pupils. A recent survey by Lambert showed that more than an hour a day, on the average, was spent by 123 teachers in Utah in conferring with individual pupils and supervising the extracurriculum activities. All pupils, not just those hav-

ing serious problems, are entitled to the best assistance available in improving their academic work, making educational and vocational choices, solving a variety of personal problems, and living fully and serving best.

The fourth duty, which many teachers already perform, is that of supervising group activities. Surveys have shown that in schools having the home room organization, three-fourths of the teachers in the school served as home room advisers. In only about one-fifth of the schools were less than half the teachers assigned to this duty. Many teachers lead one or more clubs. These group activities are one important means of making environmental adjustments in accordance with the needs discovered in the study of individuals.

Acting as Group Advisers

These functions may be performed by the classroom teacher and the home room teacher. These members of the staff may be assisted by four or eight class advisers selected because of their skill as leaders of discussion, successful relationships with pupils and teachers, spirit of service and objective attitude. These teachers should be relieved of part of their teaching load in order that they may serve as advisers of a group until it graduates. A coordinator, who may be the principal, vice principal, dean of girls or a teacher selected for this function, should unify the entire guidance program.

Skill in interviewing and making accurate and significant observations are perhaps the most important techniques for teachers to acquire. In addition, they need wide knowledge.

For example, a boy comes to a teacher because of failure in algebra. How should the teacher deal with this problem? There are numerous facts that must be obtained before any action can be taken. The teacher should ascertain the following:

What is the boy's past academic record? What is his intelligence in relation to the general population and

in relation to his schoolmates? What explanation does the boy himself give for his failure? What is the family attitude toward education and toward the boy's school work? Is algebra necessary for the boy's educational and vocational plans? What are the methods best adapted to studying algebra? On the basis of all the information on the problem, what solution does the boy suggest? Is it sound? Can it be accomplished? What is the next step to take?

Two common faults of unskilled interviewers are: talking too much and being too curious about matters irrelevant to the individual's growth. The teacher should learn to look and listen. What a pupil says is sometimes not so important as the way he says it. Every purposeful conversation is an interview. Teachers can make even the most casual contact a factor for good in the lives of their pupils.

Shakespeare's adage, "Wisely and slow, they stumble who go fast," should be followed by administrators about to initiate a program of guidance. The first step consists of individual conference group discussions with faculty members in which the aims and procedures of personnel work become clearly understood by the teachers. Books should be available to extend the discussion periods. Committees might be appointed to survey the needs in the school and to formulate the guidance functions which should be performed. The following results might be expected from such a series of meetings:

1. An appreciation on the part of all teachers of the need for work with individuals.
2. An understanding of the program as a whole and the specific results desired.
3. A list of functions to be performed.
4. A survey of the school and community facilities available for guidance, such as a central guidance or placement office and child guidance clinics.
5. Provision of materials, such as up-to-date library references on vari-

ous types of trades and occupations.

6. An allocation of functions to individuals willing and best qualified to perform them.

7. Time for teachers to perform the functions delegated to them.

8. Provision of training for those who have to perform the more specialized and technical functions, such as the giving of vocational guidance or the teaching of a course in occupations.

9. The appointment or recognition of a coordinator who will guide and cooperate with the teachers in

their work and will make connections with outside agencies.

The guidance program in any school should evolve gradually. A ready-made plan cannot be clapped down upon a situation. It is better to work with a few interested and cooperative teachers than to try to force a program of personnel work upon an entire staff, some of whom are indifferent or hostile to it. The influence of several classrooms will in time permeate the school. Personnel work will spread if it renders effective service to the individual pupil.

Tenure Laws in California

By E. B. COUCH

THE tenure laws in California have been in effect since 1921 and have carried on, with few changes, until the state legislature of 1935. At this time, practically the entire tenure law was rewritten in the light of the years' experience just passed.

In rewriting this law, the entire emphasis was placed upon the welfare of the child, leaving the protection afforded the teacher entirely incidental. It was felt that for the good of the children, it was absolutely necessary that the fit, well qualified and successful teachers should be retained in positions not subject to political and other influences in the matter of employment and dismissal.

Equally as strong was the feeling that the unfit and incompetent teacher should be eliminated from any school system for no reason other than the ultimate benefit to the pupils.

The new tenure law provides for a more definite and close supervision of the teacher's work by the administrators in charge and makes necessary conference between the administrator and the teacher long before any dismissal may take place.

In fact, the teacher must have been notified of unsatisfactory service during the semester preceding his notice of dismissal and such notice must be given with such particularity as to give the teacher an opportunity to remedy the defect. Such procedure applies to probationary as well as to so-called permanent teachers.

The causes for dismissal were extended to provide considerably more elasticity in the matter of dismissal and ensure protection against arbitrary and summary action.

The form of dismissal was changed so that the board of education does not dismiss, but gives a notice of intention to dismiss at the end of thirty days should the teacher not ask for a hearing provided for in the code. This keeps the teacher an employee of the board of education until the matter has been reviewed to determine whether or not dismissal should occur. Suspension may occur in extreme mental cases or cases of immorality, thus taking the teacher from the position during the period of investigation.

The complete text of the California tenure law may be secured from the California Teachers' Association.

Even the Best Mousetrap Needs Organized Publicity

By CLYDE R. MILLER

PROBABLY more money is wasted in certain aspects of educational research and in some types of school surveys than most persons are aware of. Offhand I can name at least six research studies and surveys which I suspect will not begin to justify the tens of thousands of dollars invested in them. The reason is not because the men and women conducting the work are incompetent, nor is it because the problems they are studying are unimportant. Quite the contrary. The trouble lies in the fact that in most of these cases little or no provision is made for getting the findings of the survey or research to the publics which should be concerned.

A group of experts may labor for months or years on some project involving school finance or curriculum and the results of their labor when finally compiled are buried in a report necessarily technical and therefore lost on many who should read it. When the report is issued, it is read by the few experts who are able to understand its technical phraseology.

A case in point is a recently completed survey conducted under the auspices of the federal government. Federal money authorized for this survey amounted to \$50,000. To this was added \$25,700 from a private foundation. Results of the survey appeared in a highly technical but highly important volume. No provision was made for placing before the people of the United States in the simple English which they could understand the very significant findings of this national survey, because no money was provided for this purpose.

At the last moment when the volumes were ready for the press one

newspaper release was hastily prepared. While the work done on this and other surveys cannot be said to be wasted, it is certain that many years will elapse before the essential findings finally filter through to the profession and through the profession to the public.

Well conducted publicity is inseparable from every salient feature of the plan or policy of a survey. When it enters into the preparation of the survey itself, it can result in a clarity of writing and an interpretation of technicalities to make the survey report more readable and understandable in itself and a much better basis for newspaper and magazine articles.

A recent state school finance survey provides an admirable illustration of how effective publicity can be when it is incorporated in a survey from the very start and enters into the preparation of the report itself.

Most survey and research reports should be so prepared as to permit release of significant portions from time to time. Then, instead of getting a column or two over the period of a day or two at the conclusion of

the survey, the public gets pretty much the whole story over the period of some months.

Admirable as was the publicity on the occasion of the release of the Hoover Social Trends report, the effect would have been better had it been possible to reveal the findings of the Social Trends Commission from time to time during the period the commission was at work. Perhaps political reasons prevented this. Certainly few studies made in our time have more important implications than those of the Social Trends Commission. It seems possible, indeed, that national policy itself might have been much more effective in lessening the effects of the depression and preparing the way to a more stable and secure order had the findings of that been going forth to the public during the years of Mr. Hoover's term as president.

When a survey or study or research is undertaken, certain questions should be asked: What is its purpose? What persons and what publics are affected? How can we make those persons and publics conscious of the work of this group of experts? If no particular publics are involved but only individuals, then it is indeed proper for the experts making the survey or research to publish their findings in technical form and call it a job. If a fairly large lay or professional public is involved, it would seem the part of wisdom to have this public in mind from the very beginning of the work and to keep it informed from the beginning to the very end. If that were done, educational progress, achievement and reform would come much more quickly in our country.

How strange that the wise men who grant funds for surveys and researches and the experts who conduct them overlook—in so many instances—the task of informing the publics concerned what their studies are about!

Time Tables

Sixty-Three School Systems Report Time Allotted to Elementary Subjects

By GEORGE C. KYTE and ROBERT H. LEWIS

BEGINNING with Payne's study of time allotments in the elementary school subjects in 1904, surveys of this nature have been made at ten-year intervals. The present investigation constitutes the survey of 1934-1935 practices. We endeavored to include in this study the data from all cities reporting in one or more of the previous investigations by Payne, Holmes, and Ayer. Usable replies were received from sixty-three representative school systems, named at the end of the article.

Obstacles to Investigator

The reports indicate the increasing difficulty of conducting studies of time allotments. The integration of subject matter and the development of activity programs are educational movements minimizing the guidance to teachers with respect to the distribution of school time. Three pertinent quotations illustrate the problem confronting the investigators and forecast the probable greater obstacles which will confront an investigator in 1944. The statements also indicate attitudes toward time allotments in the light of the trends in teaching.

"We are making an effort to deformalize our classroom procedures. Therefore, we are not adhering to any specific time allotments. The teachers are endeavoring to utilize the time so as to secure the best results for the individual and the group."

"An arbitrary statement of the time allotment to the various formal subjects would be quite misleading. . . . In the primary grades, it would be impossible to give anything like a satisfactory report based on the separation of the day into formal subject matter periods."

"We have no definite requirement as to time allotted; but the recommended portion of time given to each of the subjects in the elementary curriculum is indicated on the enclosed schedule."

Table I contains the data with re-

spect to the grade placement of each subject or some other item regularly assigned school time. When courses in the junior high schools entitled English are taken into account, it is evident that language, reading, physical training, art and music are generally placed in all eight grades. There is some tendency to omit spelling and arithmetic from grade 1 but to assign the former to all other grades through the sixth and possibly seventh grade and the latter, through the eighth grade.

Penmanship is placed in the first six grades by practically all of the school systems and also in the seventh and eighth grades by a majority of them. All the cities list the social studies or various phases of them in grades 4 to 8, almost all include them in grade 3, and a majority also present them in the first two grades.

Seventy-five per cent of the school systems place health education in the first six grades and 60 per cent continue it in the next two grades. In grade 3 to grade 6 inclusive, 83 per cent of the systems indicate instruction in phases of health education.

All Grades Teach Science

Elementary science is placed in all grades by a large majority of the school systems, 64 per cent listing it in the first grade and 83 per cent, in the eighth grade. A majority set aside time for opening exercises in all grades. These activities take various forms such as flag salute, morning in-

spection, reading of notices and scriptural reading.

More institutions include handwork of various sorts in the first six grades than the percentages would seem to indicate. Often it is implied under art but without sufficient definiteness to warrant tabulating it under handwork. Industrial arts and household arts are widely placed in the seventh and eighth grades. There is a marked tendency to place the former subject in the sixth grade also.

Recess in First Six Grades

Three tendencies characterize the inclusion or the omission of recess. At least 75 per cent of the systems make provision for it in the first six grades. When junior high schools are organized, there is a general tendency to omit the recess period, the time consumed in changing classes supplanting it. A significant number of cities indicate that, in all or in some grades, the physical training period is assimilating recess time.

The average amount of time allotted per week to each subject in every grade through the eighth is shown in Table II. The totals indicate that reading is assigned more time than is any other subject. From 508 minutes in grade 1 the average amount of time decreases irregularly grade by grade until it reaches 154 in grade 8. Marked reductions occur at four points: between grades 2 and 3, 3 and 4, 4 and 5, and 5 and 6.

The social studies are assigned the

TABLE I—GRADE PLACEMENT OF SUBJECT MATTER ACCORDING TO 63 SCHOOL SYSTEMS REPORTING IN THE FALL OF 1934

Subject	Percentage of Systems Listing Subjects in Specified Grades							
	I	II	III	IV	V	VI	VII	VIII
English.....	97	100	100	100	100	100	36	38
Language.....	98	100	100	100	100	100	64	62
Reading.....	56	98	100	100	100	100	57	58
Spelling.....	97	100	100	100	99	99	61	56
Penmanship.....	68	100	100	100	100	99	57	52
Arithmetic.....	29	29	27	22	22	22	95	96
Social studies.....	27	31	42	57	70	73	27	25
History.....	36	37	35	47	50	50	68	73
Civics.....	22	25	52	78	78	78	34	48
Geography.....	64	66	67	73	70	68	68	48
Science.....	75	78	83	83	83	83	70	83
Health education.....	93	93	95	97	95	95	61	60
Physical training.....	83	83	82	80	75	73	96	98
Recess.....	17	17	20	25	42	52	43	40
Industrial arts.....	2	2	3	7	22	35	88	83
Household arts.....	97	97	97	99	99	97	73	69
Art.....	22	20	22	20	18	17	96	88
Handwork.....	100	100	100	100	100	100	4	4
Music.....	68	66	63	63	65	63	98	98
Opening exercises.....	54	63	62	62	62	55	54	52
Miscellaneous.....							73	81
Total Number of Systems	59	59	60	60	60	60	56	52

Explanation of Terms: Language includes composition, grammar, drill on English usage; reading includes oral and silent reading, phonics, literature; science includes nature study; health education includes hygiene, physiology and health study but not physical training; physical training includes athletics, gymnastics, calisthenics, folk-dancing and directed play but not recess; civics includes citizenship, government, safety education, thrift and morals; art includes drawing, painting, modeling and picture study; handwork includes paper cutting, primary weaving, construction by young children but not industrial arts and household arts; recess includes scheduled recess periods, relief or rest periods; opening exercises include flag salute, reading of notices, scriptural reading and morning inspection; "miscellaneous" includes secondary school subjects or any subjects or activities for which time is allotted regularly but which are not listed elsewhere.

second largest amount of time largely owing to the allotments in grades 4 to 8 inclusive. There is also a distinct tendency to give the subject considerable stress in grade 3. In the highest four grades, the number of minutes per week per grade allotted to the social studies, approximating 300 minutes, exceeds other subjects.

Although arithmetic receives a total amount of time which places the subject in third place in this respect, in the average amount of time allotted per grade it ranks second in all grades except grades 1, 4 and 5. The small amount of time assigned to the subject in the first grade is due to the number of systems allotting no time to it in this grade and to others providing for only incidental instruction in the subject. This latter reason accounts for the smaller amount allotted in grade 2 than that in grade 3 but its continued omission by some of the cities affects the average.

Language clearly ranks as the fourth subject in terms of the total amount of time allotted to it. From this standpoint, however, it ranks second in grade 1 and third in grades 2, 3, 7 and 8. Beginning with an average

of 129 minutes per week in the first grade, the amounts gradually increase until the average weekly allotment is 212 minutes in grade 7.

The small weekly time allotments per grade assigned to spelling and to penmanship indicate the general tendency to follow the conclusions obtained from the various research studies regarding drill. The small averages for spelling in grades 1 and

8 and for penmanship in grades 7 and 8 are due to the number of school systems omitting these subjects from the specified grades. Increments of time allotted to spelling in grades 3 and up used for dictionary drill and word study constitute the primary cause of the average amount per grade for spelling exceeding that for penmanship.

Omission of health education and of science by some school systems causes the average amount per grade for each subject to be small. But the tendency to include these subjects incidentally and often as part of reading and language instruction is the more prominent factor affecting the time allotted. As they are actually taught, therefore, they occupy more time in the instructional program than the averages would seem to indicate. The introduction of general science in junior high schools accounts for the increased time allotments in the grades above the sixth.

The time allotments per grade for art and music disclose the tendency to set aside about 90 minutes per week to each of these subjects in every grade. The number of cities tending to allot 100 minutes per week to art and 75 minutes per week to music affects to some extent the differences in the two sets.

Physical training is assigned average time allotments which vary only

TABLE II—AVERAGE NUMBER OF MINUTES PER WEEK ALLOTTED TO ELEMENTARY SUBJECTS IN 1934-1935

Subject	Number of Minutes per Week in Specified Grades								Total
	I	II	III	IV	V	VI	VII	VIII	
Language.....	129	131	155	173	184	187	212	212	1,383
Reading.....	508	456	382	282	227	201	157	154	2,367
Spelling.....	29	82	92	92	88	86	84	77	630
Penmanship.....	76	78	84	81	74	74	55	50	572
Arithmetic.....	62	145	197	215	219	219	232	236	1,525
Social studies*.....	79	88	139	228	282	297	323	297	1,733
Science.....	43	46	53	48	48	49	73	109	469
Health education.....	29	26	31	35	38	38	34	35	266
Physical training.....	109	109	111	109	109	112	110	110	879
Recess.....	104	107	103	93	86	82	52	44	671
Household art.....	23	21	23	27	42	57	136	118	447
Industrial art and handwork.....									
Art.....	98	87	85	89	89	91	91	82	712
Music.....	82	82	85	86	87	90	85	82	679
Opening exercises.....	43	43	43	42	41	38	28	26	304
Miscellaneous.....	67	74	67	63	65	61	112	150	659
Total Number of Minutes.....	1,481	1,575	1,650	1,663	1,679	1,682	1,784	1,782	13,296

*Includes history, civics and geography.

slightly from grade to grade, approximating 110 minutes per week per grade. The time assigned to recess periods averages a little more than 100 minutes per week in each of the first three grades. The average amounts decrease in successive grades until they reach only 44 minutes per week in grade 8.

For the total period of eight school years, 48.7 per cent of the time is devoted to the subjects commonly described as the Three R's—reading, penmanship, spelling, language and arithmetic. The content subjects, consisting of science and the social sciences, are assigned 16.6 per cent of the total time. The special subjects, including all of the rest, are given 34.7 per cent of the time. Naturally, the relative amounts differ markedly from grade to grade, as may be seen by an inspection of the data in Table II.

Cities Cooperating

Usable replies for this investigation were received from: Akron, Ohio; Albany, N. Y.; Atlanta, Ga.; Baltimore; Berkeley, Calif.; Birmingham, Ala.; Boston; Boulder, Colo.; Bridgeport, Conn.; Cheyenne, Wyo.; Chicago; Cincinnati, Ohio; Cleveland; Columbus, Ga.; Denver; Des Moines, Iowa; Detroit; Freeport, Ill.; Grand Rapids, Mich.; Hartford, Conn.; Haverford, Pa.; Jersey City, N. J.; Kansas City, Kan.; Lexington, Ky.; Louisville, Ky.; Madison, Wis.; Milwaukee; Montpelier, Vt.; Newark, N. J.; New Bedford, Mass.; New Haven, Conn.; New Orleans; New York City; Oakland, Calif.; Omaha, Neb.; Passaic, N. J.; Paterson, N. J.; Philadelphia; Phoenix, Ariz.; Pittsburgh; Providence, R. I.; Reading, Pa.; Richmond, Va.; Rochester, N. Y.; Sacramento, Calif.; St. Louis, Mo.; Salt Lake City, Utah; San Antonio, Tex.; San Francisco; Scranton, Pa.; Seattle, Wash.; Sioux Falls, S. D.; Solvay, N. Y.; Spokane, Wash.; Springfield, Mass.; Syracuse, N. Y.; Tacoma, Wash.; Topeka, Kan.; Trenton, N. J.; Washington, D. C.; Wheeling, W. Va.; Worcester, Mass., and Youngstown, Ohio.

Finds English Grammar of No Benefit to Pupils of Foreign Language

By JOSEPH E. BARBER

AFTER an experimental trial of two years, the study of English grammar has been again dropped from the curriculum of the East Aurora High School, East Aurora, N. Y. The result of the experiment indicated that the teaching of grammar was not immediately valuable to pupils in foreign languages despite the assumptions of the teachers.

Grammar, hereafter, will be taught as a definite and tangible part of the course in the study in English and not in isolation. Our experiments prove that English grammar has not been of any benefit to pupils of foreign languages nor has it raised the grades in other subjects.

On the first day of each school session, a standardized test in English grammar was given to all pupils entering the ninth grade. Those who secured a mark below the norm for this grade were scheduled for a course in English grammar and no pupil was allowed to begin the study of a foreign language unless he had either passed the English grammar examination or had completed a course in the subject.

Results of Experiment

A careful record of test scores, state regents examination grades, intelligent quotients and the like have been kept of all pupils. This study failed to disclose that grammar instruction had brought about any changes in the grades that were earned by the same pupils who had completed the study of a foreign language.

The coefficient of correlation between the results of the grammar tests and the results of the regents examinations in a foreign language was .29 with a P. E. of .02.

A study of the pupils who were excused from the English grammar

course because of their high score shows a correlation of .41 with a P. E. of .02 between their grammar ability and their foreign language work.

It is worthy of interest to note that there is but one point difference between the mean I. Q. of the pupils who were scheduled for a course in English grammar and those who were excused from that course. There are but two points difference between the mean in the final result of a foreign language examination given to the group that had been instructed in grammar and those who were excused from this work.

Theory Does Not Hold

If one compares the preliminary grades of the English grammar group with those who were excused from grammar training, we again find but two points difference in the mean. Evidently the two groups are about equal in everything except the ability to score on an English grammar test where there were five points difference in the mean. It is also quite evident that the lack of grammatical information has not affected their preliminary average or the foreign language results as much as it should according to theory.

The best coefficient of correlation was secured from the preliminary grade average and the foreign language results; this being .71 with a P. E. of .046. This does not permit the drawing of definite conclusions such as predicting the grade that a pupil will earn on a foreign language examination on the basis of the preliminary examination average. It is, however, a more satisfactory basis of predicting final results of a foreign language examination than the results of a study of English grammar or the score earned on a standardized English grammar test.



You step off the train at this station, take a cab to your hotel, freshen up a bit and then set off for the handsome new municipal auditorium where the Department of Superintendence will meet.

lying suburbs, has an estimated population of more than a million.

One of the newest features of St. Louis is the municipal auditorium, dedicated in 1934. It is in this building that the Department of Superintendence will hold its general meetings and many of the sectional meetings in 1936. The auditorium makes an imposing appearance in a row of public structures fronting the new plaza.

The city's ability to act as host to the Department of Superintendence has been augmented in recent years by an increase in the number of hotels which are now adequate for the entertainment of the country's largest conventions. The Jefferson Hotel at 12th and Locust Streets has been designated as headquarters for the Department of Superintendence. Other downtown hotels easily accessible to the auditorium include the Statler, chosen as headquarters for the executive officers, Robert E. Lee, Lennox, Mark Twain, Marquette, Mayfair, Warwick. Several other excellent hotels are located west of Grand Boulevard, including the Chase, Coronado, Fairgrounds, Forest Park, Kings-Way, Melbourne, Parkedge, Park Manor, Roosevelt and others.

St. Louis is accessible by train, bus or airplane. Twenty-five railroads, including seventeen trunk lines, enter St. Louis, arriving and departing from Union Station. Many bus companies also operate daily service and maintain depots in the downtown section. The Lambert-St. Louis Municipal Airport is located northwest of the city about sixteen miles. Automobiles marked "Airport" provide transportation to the city.

St. Louis—A City Devoted to Education

By HENRY J. GERLING

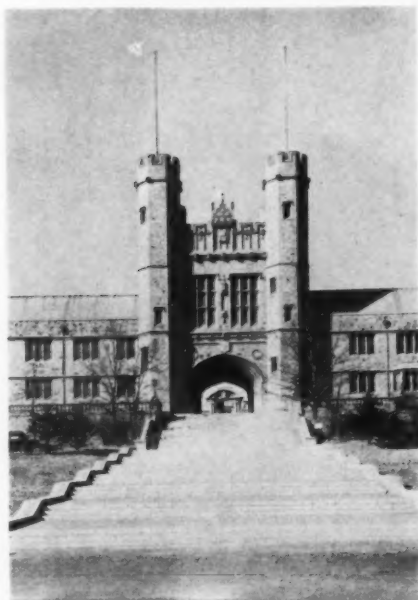
ST. LOUIS began its career under the Stars and Stripes in 1804 soon after the purchase of Louisiana. In March of that year this city, then a fur trading village of a thousand people, had the unique experience of being governed under three national flags within three days

—the Spanish, the French and the flag of the United States. The *St. Louis Globe-Democrat* refers now to the city of St. Louis and its trade area as the 49th state. The incorporated city has a population exceeding 821,000, and the metropolitan district, including the city and its out-

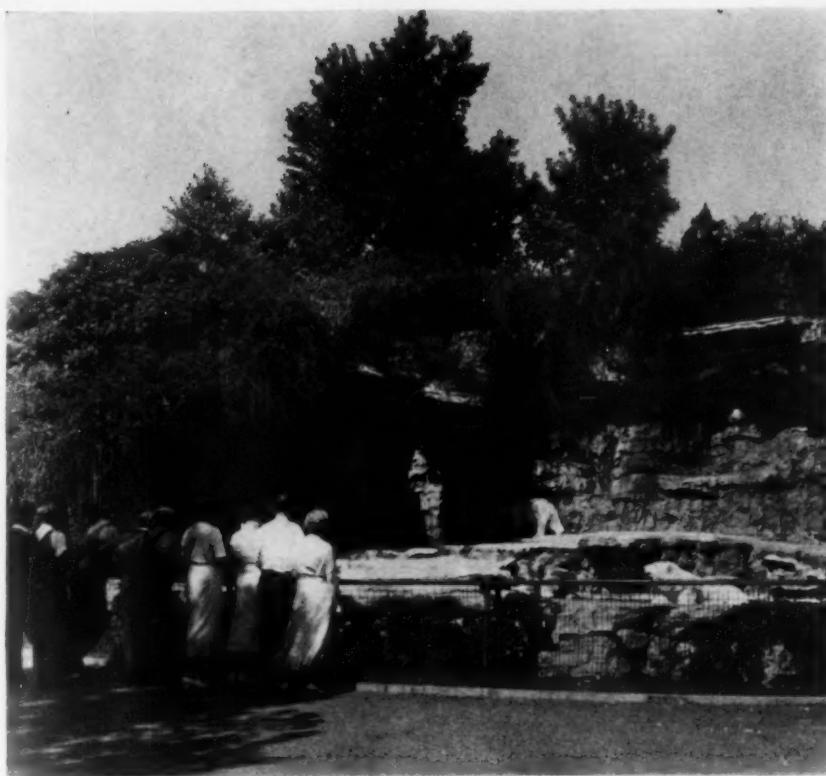
Visitors to St. Louis will find several points of educational and historical interest. Among these are the City Art Museum, located on the crest of Art Hill in Forest Park; the Jefferson Memorial, in which is found the collection of gifts sent to Col. Charles A. Lindbergh after his memorable nonstop flight from New York to Paris; the Missouri Botanical Garden, usually known as Shaw's Garden; the Old Courthouse, located at Broadway and Market, where the Dredd-Scott slave case was heard and where slaves were sold at auction in antebellum days. Other points of interest are the educational institutions and the beautiful churches.

Two large universities, fully accredited by the North Central Association, are located in St. Louis. Washington University just outside of the city limits overlooks Forest Park from the west. St. Louis University is on Grand Boulevard between Lindell and West Pine. Both of these universities maintain, in addition to the academic colleges, a number of professional schools and departments for graduate study. In addition to these two universities, a number of privately endowed colleges and professional schools have a prosperous patronage.

The churches of St. Louis will welcome gladly any members of the De-



These steps lead up to the administration building, Washington University.



Forest Park has a zoo, as well as an art museum and the Jefferson Memorial.

partment of Superintendence who chose to spend Sunday in the city. Christ Church Cathedral, Episcopal, located at 13th and Locust Streets, is an old, historic church. Its outstanding feature is its glorious altar and reredos. At the four corners at Kings-highway and Washington four beautiful churches are located: Temple Israel, First Church of Christ Scientist, St. Johns Methodist Episcopal and the Second Baptist. At Lindell and Newstead is the New Cathedral, seat of the Catholic churches in St. Louis archdiocese. It is one of the largest and most magnificent cathedrals in the United States. Its noted mosaic has been in process of placement since 1914 and is valued at more than two million dollars.

St. Louis has 162 separate public schools enrolling slightly more than 100,000 pupils. These schools are classified as follows:

	No. White	No. Negro
Teachers'	1	1
High schools	7	2
Vocational	1	1
Elementary	91	16
Special	24	5
Evening	11	2
Total	135	27

Special schools include classes for

the mentally retarded, classes for the deaf and hard of hearing, sight conservation classes, open air classes and classes for children confined to hospitals and other institutions. The cost of education has been lowered in every type of school during the last three years to meet a diminishing income, but the school term has not been shortened nor have any of the vital services been discontinued.

One of the unique features of the St. Louis public schools, in which school administrators may be interested, is a system of ninth grade centers. Financial necessity actuated this innovation. While income was diminishing the high school enrollment increased 50 per cent during the last four years. It became necessary to utilize all of the junior high school buildings for senior high school purposes. Vacant rooms in the elementary schools were available for pupils in the seventh and eighth grades and ultimately had to be used for pupils of the ninth grade.

Organized separately from the other grades, this group constitutes a miniature high school in the local community. Naturally the ninth



St. Louis scenes here depicted are a view in Reservoir Park, at the left, the Art Museum in Forest Park, below, and Soldan High School, at the foot of the page. This high school, built in 1909, was named after F. Louis Soldan, a former superintendent of schools.





Every one wants a look at the Lindbergh trophies housed in this building.

grade centers offer fewer opportunities for elective studies, but with the admission to senior high schools in the tenth grade the full range of high school electives becomes possible. In the meantime, the ninth grade centers departmentally organized and pursuing high school methods offer an easy transition from the one-teacher instruction of the eighth grade to the type of departmental instruction that prevails in the senior high schools.

The high school system of St. Louis may be of interest to those who are working in the field of secondary education. From the beginning of its secondary school system, St. Louis has maintained cosmopolitan high schools. Each high school in operation bears a close resemblance to every other and offers the full range of authorized courses with but a few recent exceptions. Developments in recent years have taken away most of the ninth grade pupils, as mentioned in a previous

paragraph; and furthermore, the opening of vocational schools only a few years ago is tending to take away those pupils whose primary interest is in vocational instruction including shopwork, cooking, sewing and the commercial studies.

The St. Louis school system may be interesting also to some of the members of the Department of Superintendence from the standpoint of its separate schools for Negroes. The board of education maintains the two systems of schools on an equal basis. The children of colored parentage are given the same school curriculum, the same quota of supplies and textbooks, the same equipment and the same educational opportunities in every respect as those provided in schools for the white. Negro principals and teachers are appointed for all of the colored schools, and the schedules for salaries, length of term and other such matters are uniform throughout the system.

Historically St. Louis is the home

of the public school kindergarten in the United States. At the old Des Peres School, which still stands at 6300 South Michigan Avenue, the first successful public school kindergarten was opened by Susan E. Blow, under the superintendency of Dr. William T. Harris in 1873. Kindergartens are a part of every regular elementary school in St. Louis at present. In 1913 the age of admission was reduced from six to five years.

Visitors to St. Louis during the meetings of the Department of Superintendence are invited to see any phase of the public school work in which they may have a special interest. They may be assured also of a cordial welcome to the city at large. The people of St. Louis have never failed to express their devotion to education even in the years of depression; they will be especially happy, therefore, to entertain the Department of Superintendence in its next annual meeting.

Cumulative Sick-Leave Plan Is Successful

By A. L. THRELKELD

DENVER maintains a sick-leave provision for teachers as follows: Five days of sick leave with full pay are allowed each year. These are cumulative. They may be used not only for the teacher's own illness but also for illness or death in the family or for illness or death of near relatives or friends. When the number of days of sick leave allowed are exhausted, the amount of the supply teacher's salary is deducted from the teacher's salary for fifteen days more, after which time the teacher's name is dropped from the pay roll.

Every two years an appraisal is made by the research department. The last report is based on the record of the school year 1933-1934. In this report most of the comparisons show what effect the depression had on illness among teachers.

For those using sick leave during the year 1933-1934 the median number of days used was 3.73, compared to 3.69 days for the year 1929-1930, and 4.58 days for the year 1928-1929. The 25 per cent of the teachers using the fewest number of days in 1933-1934 used 1.8 days or less; in 1929-1930, 2.09 days or less, in 1928-1929, 2.99 days or less.

The 25 per cent of the teachers using the greatest number of days of sick leave in 1933-1934 used 4.97 or more; in 1929-1930, 5.34 or more, in 1928-1929, 5.48 or more.

The accumulated days of unused sick leave in 1933-1934 and 1929-1930 were as follows: The median days accumulated by all teachers at the end of 1933-1934 was 14; at the end of 1929-1930, 9 days. The lowest 25 per cent had, in 1933-1934, ac-

cumulated 3 days or less; in 1929-1930, 2 days or less.

The highest 25 per cent had, in 1933-1934, accumulated 32 days or more; in 1929-1930, 24 days or more.

The highest 10 per cent had, in 1933-1934, accumulated 49 days or more; in 1929-1930, 46 days or more.

The highest individual had, in 1933-1934, accumulated 120 days; in 1929-1930, 100 days.

The cost of this plan to the school district may be ascertained from the following table, which compares the

COMPARATIVE COSTS, 1929-1930 AND 1933-1934

I	
Total salaries paid to teachers during sick leave	
1929-1930	1933-1934
\$63,278.40	\$61,841.81
II	
Total salaries paid to supply teachers for teachers on sick leave but not off the pay roll	
1929-1930	1933-1934
\$29,610.08	\$29,599.50
III	
Total cost of sick leave while teachers are on the pay roll	
1929-1930	1933-1934
\$92,888.48	\$91,441.31
IV	
Salaries lost by teachers off the pay roll	
1929-1930	1933-1934
\$11,453.19	\$12,494.49
V	
Paid to supply teachers by district for teachers off the pay roll	
1929-1930	1933-1934
\$4,026.17	\$5,212.50
VI	
Saved to the district on account of teachers off the pay roll	
1929-1930	1933-1934
\$7,427.02	\$7,281.99
VII	
Actual cost to the district due to sickness (2 minus 6)	
1929-1930	1933-1934
\$22,183.06	\$22,307.51

two years 1929-1930 and 1933-1934.

The commonest questions that arise concerning the various types of sick-leave plans include:

Are teachers inclined to abuse sick-leave plans?

The data in Denver do not indicate any such abuse. They indicate quite the contrary situation. It is of special significance in this connection to note the large accumulation of sick leave on the part of teachers retiring on pension. If any group in the corps would have reason to draw heavily upon its sick-leave privileges, it would be the group advanced in years and eligible to retirement. Yet, the mean cumulated sick leave available at the time of retirement, but never used, was 36.5 days for the various groups retired during the last ten-year period.

In the administration of the sick-leave plan in Denver, doctors' certificates are not required. The principal reports the teacher absent on account of illness upon the teacher's so reporting to him. In a typical instance this simply means that the word of the teacher is good.

Is the cumulative sick-leave plan more likely to induce abuse than the more limited type of sick-leave plan, such as one that allows five days per annum, not cumulative?

This study does not answer this question definitely, since it deals only with the facts revealed by the kind of plan used in Denver. However, it is hard to see why the cumulative feature would cause general abuse. Its very nature suggests the opposite. Under a limited plan, say one that allows a teacher five days a year which must be used during that year, the teacher knows if he does not use his five days in any one year he will never get them.

In a plan such as ours which allows cumulation, the thinking individual will reason that it is to his advantage to save these days, for he never can tell when he may have a long illness and need the cumulation.

The cost of this plan in Denver, 0.6 per cent of the salary budget, cannot be considered excessive.

I Am a School Board Member

Intimate Confessions of a Puzzled Business Man

I AM a member of a school board. I have served in several capacities on more than one board. I have been chairman of several committees, secretary, president. I know something from experience both of elementary and high school problems. I have had many colleagues and I have known many teachers and several superintendents rather intimately. And now the longer I serve, the harder I work, the more bothered I am.

What are my duties; what my privileges? What should I try to accomplish and what not? What is expected from me by the citizens who elected me; what by the teachers? In my dozen or more board meetings yearly am I merely a figurehead, an unpaid accountant; or am I supposed to perform a thoughtful, useful function? I stand for democracy in education, but am I functioning democratically? Or is the educational machine running on its own momentum imparted by past great leaders, and am I in the way?

Merely an Automaton?

Recently I received a circular published by a great state from data of its state university on the subject of school organization. School boards were told unequivocally that they were merely legislative, that the superintendent was the board's executive and that board members had no rights or duties outside the board room.

Yet without compensation I must sign several hundred documents monthly. Being an official of the board I must be legally responsible for my signature, therefore for the accuracy of the checks, bonds and tax warrants I sign and for the bills that my signature authorizes and

pays. No superintendent, acting as a so-called administrative executive, can absolve me from this responsibility so long as the law imposes it upon me. Yet by implication of the great state and its university I am merely an automaton.

Occult Mysteries

If with my colleagues I tax too low to suit the teachers, my name is anathema; if too high to suit the grumbling taxpayer, the same thing. If in time of economic stress I happen to be blessed with spare funds to invest and go into them to meet a payroll or two, as I have done, no one knows about it, and executives, teachers and other board members think it good fortune, sufficiently so to want to spend more than they should. If I caution for the sake of forehandedness, I am considered pessimistic. But what seems to me most important is the implication that I do not know, should not know and cannot possibly learn anything about the occult mysteries of educational processes.

Now, confessedly, I am a layman; even though I have my own profession, I am not a teacher. I have not attended courses in education at Columbia or Chicago, nor have I the bent for teaching if I had the required credits. My viewpoint is cursed with being "practical." Over a fairly long life I have disciplined myself to adjust my living, my leisure, my avocations and my work according to my own and surrounding circumstances. Being governed by the profit motive, I must do some quick thinking and quicker jumping in these adjustments. But I do not

always see the same tendency for adjustment in school life, which bothers me, especially in view of my own equivocal connection with school life.

In times of economic stress how do my duties change? Shall I listen chiefly to the teaching staff, or to the taxpayers and their vociferous newspaper supporters? If to the former, am I representative of the people? If to the latter, am I not then definitely taking a hand in the vital things of education, when I am neither a trained educator nor a paid servant, and because of the latter I may tire of my thankless responsibilities and quit, thus making room for more radical and possibly less thoughtful successors? Or I may be put out to the same end.

If I put great energy into the physical and financial side of school matters, am I shirking when I do not try to correct educational blunders? Should I try to correct them? Why think of these things? Are these not the duties of the paid faculty, deans, principals? Yes, in a measure. But who put them in their jobs and who is to be their judge?

Left Off Committees

Here is an economic upheaval, caused primarily by the unprecedented strains of the World War. It has resulted emphatically in a revolution in many departments of life. The educational world has been shaken, many teachers have lost their employment, new recruits must seek other vocations, wages are cut and in many cases schools are curtailed in their activities.

In this upheaval none knows

quite so much of cause and effect, substitutes, alternatives, squirming, balancing budgets, borrowing, defaulting, legislating, lobbying and all such-like as does the school board member. The teachers' organizations at last learn that in state houses they are thought to be talking one for the children and two for their salaries. Yet when state committees are appointed to help in adjustments, the school board member is generally left off because he is not an educator. There are largely attended and widely heralded round-tables at the prominent universities where heads of the departments of education discuss the downright imperative need for adjustments in curriculums to meet the economic situation. The school board member is persona non grata there.

In Small School Systems

In these circumstances the chances are that things educational are going to remain static. Principals don't wish to stir up anything that will jeopardize either their school or themselves. What one great school man has termed "vested interests" in education are keeping pressure on pretty steadily to hold things as they are, partly at least from self-interest.

Does the school board member heed these challenges? If not, may we ask the question, Of what use is the average school board member? Does he reflect his own community adequately? Does he tend even remotely to correct things educational by insisting that the trained educators revamp when necessary? Or does he, after selecting the head of his school, fly that man's kite or ballast the tail of it? Doubtless in many cases he stiffens backbones, secures new legislation, finances, helps to build and to interpret to the apathetic public; and sometimes he muddles. But of the bigger job, what are the causes and effects behind present day standpatism? What are the remedies?

I am not speaking now of school systems in huge cities, where politics and graft can determine so much. Rather I have in mind the smaller cities, towns and suburban communi-

ties where progress could be rapid and intelligent if right methods could be practically applied. It seems to me that democratic representation in education ere long will have to justify itself. One of its greatest justifications would be the effecting of a sane, logical compromise between academic and economic domination of teaching and curriculums. It does not do so now, generally speaking, for several obvious reasons:

1. When party politics does not influence elections of school boards, the parent-teacher association usually has a voice but not always is that voice used in support of the best fitted candidate for board membership, having in mind real balance and tireless service.

2. The tradition about the board member's job is that it is simply to O. K. bills, and usually the teaching staff wishes that tradition to persist.

3. It is too easy to elect members who give pleasant lip service but never dig deeply. School boards could lead not only their staffs but the community.

4. In the absence of educationally minded school boards, it is easier to let things alone.

Single Viewpoint Insufficient

From the foregoing it should be obvious that I think the theory of school boards being only legislative in the narrow sense is a fallacy and should be branded as such. Not one out of fifty teachers and deans knows other than the pedagogical viewpoint. Many of them are much too young to tackle the greater problems of educational change. Many others dare not. Therefore, it would follow that if the school board is to help in the job, educators should remove the stigma of educational incompetence from board membership, and boards should be recruited from those citizens who can assist generously and intelligently.

I appreciate the many difficulties in the way. Board members are volunteers who do not wish to be tied down too much; they are transient.

Too radical action by one type of group might cause an upset. Real problems cannot be studied adequately by transients, and because of this boards usually do not know when real progress is being made. Boards usually are too small for real deliberation on far-reaching changes. The fluctuations in boards would be ruinous if they occurred in boards of directors of corporations of similar size. Public apathy, save in crises either financial or disciplinary, abet the board member in his casual attitude, for the public as a whole does not know education even when it is labeled.

Economic Revolution Is On

But why all this pother? We are educating on a white collar basis that was established when manual labor was being recruited from immigrants. Now we are on immigration quotas. We still think that our own little Jonnie may some day be president, notwithstanding the truism that with 130,000,000 inhabitants and universal white collar education, there are no longer the same chances for jobs of leadership there were fifty years ago. We have seen the opportunities for careers definitely wiped out in many fields such as railroading, banking, investment banking, public utilities and small independent stores. We have seen put in their place millions of jobs in bureaus under political supervision, not to count results from mechanization, mass production and chain merchandising. We are in the midst of another economic revolution as great as that ushered in with the application of steam.

Some educators recognize this. Parents do not get the implication. The elementary school still teaches to fit for the high school, and the high school for college, largely irrespective of the terrible mortality of college prospects in high school. This problem is not one merely of normal school credits and conventions of the N. E. A. If American education in process and result is to be democratic, the board member is a challenge both to that system and to himself.

Better Budgets

By WALTER C. REUSSER

THE steps of budget preparation, presentation and adoption complete the formal preparation and acceptance of the budget plan. Two preceding articles have discussed these phases of budgetary procedure in the various states of the Union.* This article deals with the administration of the school budget as prescribed by the laws of the states.

The real test of any budget comes in its administration—the best plan will fail if it is not properly administered and even a poor plan may succeed when well administered. The provisions of law in the states are as a rule less specific in regard to budget administration than they are in regard to its preparation and adoption; however, certain well defined provisions for budget administration are evident.

The administration of the school budget, as its preparation, is generally regarded as an executive function and belongs to the superintendent of schools and the business manager rather than to the board of education. In the state laws the boards of education are charged with the responsibility of administering the budget in forty of the forty-eight states.

Board Named Administrator

In Arkansas, Louisiana and Utah the superintendents of schools and the boards of education are named. In a large number of districts throughout the country this responsibility is delegated to the superintendent and his staff. It is significant, however, that so few states mention the super-

intendent. There are large numbers of districts in each of the twenty-six district unit states in which the boards of education must administer whatever budget there may be without the help of an executive officer. In a number of states no mention is made of the administration of the budget, but it may be assumed that the boards have this power by implication since they are in charge.

Control of Expenditures

While there are nearly half of the states in which boards of education are partially dependent upon other agencies in the determination of the amount of monies that are to be made available to the schools, there are relatively few that seek to exercise this control through the budget. Most of the states have a check on amounts expended for schools by means of a maximum tax levy limitation. A few have no maximum levies.

In the states that have adopted the budget system for school units, there are some that limit the boards of education rigidly to the budgetary statement as adopted; in others, boards pay little attention to the budget after it is made and adopted, since there is no provision of law that compels them to live within the adopted budgets. The budgets in the latter cases are merely for the purpose of determining the amount of the tax to be raised locally.

New Mexico is an example of a state in which the laws compel school boards to keep within their budgets, whereas in Arizona the budgets are not regulatory of ex-

The Facts Are That—

1. State school laws are less specific in matters of budget administration than in budget preparation, presentation and adoption. There appears to be a need for more definite provisions in many of the states for the administration of the school budget.

2. There is not sufficient recognition in state school budget provisions of the fact that the budget may be the means of controlling expenditures.

3. There is little recognition in the laws of the states that emergency needs can be estimated.

4. Borrowing money for current expenditures is a general practice among school districts.

5. Transfers of funds from one budget item to another is within the authority of the board of education, but transfers from one fund to another is generally restricted.

6. Little recognition is given of the superiority of the independent audit over other types of audit.

penditures at all. There seems to be little justification in setting up a procedure for making and approving a budget unless there is also provision for compelling school officials to keep within the budgetary statement. A certain amount of flexibility is, of course, desirable such as in the meeting of expenditures caused by an emergency.

Meeting Emergency Needs

A number of provisions are made in the laws of the states for meeting emergency needs arising within the schools. The three most common are: (a) by placing an emergency fund in the budget, (b) by providing for additional taxes or appropriations, and (c) by borrowing to meet such needs.

In at least eleven states the budget forms as prescribed by law or by state officials provide for an emergency fund in the budget. In Kansas and

*The NATION'S SCHOOLS, November and December, 1935.

California the emergency fund may be equal in amount to 10 per cent of the budget while in the New Jersey budgets the emergency fund is limited to 1 per cent of the total budget. The laws of seven states prohibit the inclusion of an emergency or miscellaneous fund in the budget.

In Iowa an emergency fund may be raised by a special tax not to exceed one mill upon the granting of a petition presented to the state comptroller. In New Mexico the state tax commission may approve a transfer from the county emergency fund to school districts. In some of the Eastern states where money is appropriated by the city or town officials for the school department, emergencies may be met by additional appropriations.

Perhaps the most commonly accepted method of meeting expenditures for emergency needs is by borrowing money on the credit of the district. Such indebtedness may be liquidated by making a higher levy during the next fiscal year or by a special tax. This is especially true in cases where the emergency expenditure is for capital expenditures such as for buildings.

Borrowing for Current Expenses

The three most commonly found methods of enabling schools to meet their current obligations throughout the year and at periods when there is little income are: (a) issuing anticipation warrants, (b) borrowing money, and (c) carrying large balances.

Issuing warrants in anticipation of tax collections has been a means resorted to by the districts in many states in the past few years. In some of the states a limitation is placed on the amount of such anticipation warrants that may be issued. This method of financing current expenditures is permitted by one or more types of districts in two-thirds of the states.

Twelve states provide in their laws for the borrowing of money by school districts for meeting current expenditures. Alabama permits such borrow-

ing to pay teachers' salaries and other current expenses but the amount so borrowed may not exceed one-third of the current expenditures of the preceding year.

In Arkansas districts may borrow money from banks, individuals or from the next year's revenue to the amount of the maximum non-bonded indebtedness of the district during the preceding year. In Florida school districts may borrow money in any amount up to 80 per cent of the estimated expenditures, Louisiana permits 75 per cent and Mississippi 50 per cent.

In contrast to the provisions cited there are those in other states such as Arizona, West Virginia and Wisconsin, which do not permit school districts to borrow money for current operation. While some flexibility must no doubt be allowed in securing funds for payment of current expenditures, this problem is one of adjusting the dates when monies flow into the school treasury. Provisions for payment of the different state and county tax collections to school districts regularly throughout the year would in many cases alleviate the necessity of borrowing for current expenditures.

In the seventeen states reporting on the disposition of unexpended balances, there are at least three methods used: (a) appropriating such balance to the next fiscal year, (b) lapse of appropriations or the reversion of any balance to a general fund, and (c) transferring such balances. Ten of the states reporting provide for the carrying over of balances to the next year, and seven states provide for the reverting of such balances to a general fund to be redistributed in the next year's budget.

Transfer of Funds

Transfer of monies from one budget item to another is generally allowed at the discretion of the boards of education; specific restrictions are, however, placed on the transferring of monies from one fund to another fund. Twenty states report on transfers within budget items. Transfer of

monies from the incidental fund to the building fund may be made in Missouri for the purpose of necessary repairs to school buildings, and any balance in the building fund may be transferred back to the incidental fund. The Iowa provision is somewhat similar—surpluses in the general fund may be transferred to the schoolhouse fund by the board of education, but transfers from the schoolhouse fund to the general fund may be made only by majority vote of the electors of the district.

Auditing Accounts

The auditing of the accounts of the school units is a function both executive and legislative. The administrative audit made regularly by the administration to the board of education is not emphasized in the legal provisions in the states. Such audits as are prescribed by the statutes are of three types: (a) audits by county or state officials, (b) those made by competent accountants independent of school districts, officials or governmental agencies, and (c) audits made by laymen.

Audits made by county or state officials may be mandatory or optional. When optional they are not usually made regularly and when mandatory are often made in a perfunctory manner. The most common state agencies are the department of education, auditor and examiner.

The independent audit is not generally required in the states, but when made the auditor must be one satisfactory to the state department.

From the provisions made for auditing school accounts, it is clear that not sufficient emphasis is placed on the independent audit. Provisions for audits by state and county officials should be strengthened and audits made by laymen cannot, as a rule, serve the purposes for which audits are made.

Numerous other phases of financial administration could be traced through the provisions in the various states, but in all cases one is impressed by the great diversity of the provisions and variations in practice.

Court Rulings on Consolidation and Pupil Transportation

By M. M. CHAMBERS

EVERYONE knows that one of the most significant current long-time social trends is the development of the consolidated rural school as an efficient educational unit, to the end that every rural child may have access to educational and social opportunities at least equal to those which have long existed in towns and cities, and the means of understanding current and future movements in American economic, political and industrial life.

In common with all important social changes, the movement meets constantly with resistance based upon what individuals and small local communities regard as their own best interests. Frequently this opposition takes the form of litigation in which the alleged rights of local taxpayers or of local school authorities are pitted against measures designed for the welfare of the larger community, including all its component parts. Thus the effectiveness of progressive legislation is often conditioned by the way in which the courts construe it in contested cases.

State Power Sustained

Observation of the constant stream of judicial decisions leads to the conclusion that generally American courts sustain the power of the state to make needed changes in the pattern of the local units of school administration, for such units are merely creatures of state law set up for the performance of a state function and never possess any inherent or inalienable sovereignty of their own. In fact, the obstacles to school district reorganization are largely not legal, but political.

Transportation of pupils at public

expense is a corollary of district consolidation, if the traditional and admirable principle of placing the school within reach of every child without undue hardship or hazard is to be maintained. Consequently progressive legislation looking toward larger school units must contain provision for mandatory transportation of pupils living more than a convenient distance from the school.

In this matter controversies frequently arise between local school boards and the parents of children so situated as to claim rights under the statutes providing for transportation.

Progress in Kentucky

A recent interpretation of the modernized school code adopted by Kentucky in 1934 gives strength to the tendency toward the development of a really effective county unit for rural schools in that state. A cogent statement of the philosophy of the larger school unit may be quoted directly in the words of Stanley, special commissioner, whose report was adopted as the opinion of the whole court of appeals:

"In the process of development of the school laws and system of the state before the 1934 act, there was a gradual departure from the old plan of community control of local schools. A county board of education was established and its powers enlarged from time to time. The legislature provided that the county outside of the established independent and city school districts should constitute one district, and vested broad powers in the county board in the matter of changing, consolidating and establishing subdistricts. . . .

"The experience of the educators and administrative officers proved the wisdom of this departure from local influences so that the concept of centralization and unification in management appears throughout the new code as one of the primary timbers in the structure. . . . The authority of administering the affairs of the county district is vested in the county board, which is given greater discretionary powers than formerly."

Specifically, the new code automatically abolished all subdistricts having a pupil population of fewer than fifty, and empowered the county boards to abolish all other subdistricts "when necessary." The court holds that the intent of the legislature was to invest the county boards with discretion to determine when the abolition of all subdistricts is necessary in the interest of all concerned, and that they may take such action without waiting for the creation of any new school facilities, but as an administrative measure looking toward future relocation.

Such a step, says the court, is merely an exercise of administrative power, and the law authorizing it is not an unconstitutional delegation of legislative power to the county boards.

County Must Provide Busses

In the case at issue, Bath County had thirty-eight subdistricts, of which twelve had fewer than fifty resident pupils. Prior to any reorganization, the local trustee in one of the larger subdistricts properly nominated the plaintiff as teacher to the county board. One month later, without having acted on the nomination, the board abolished all subdistricts, and

later employed another teacher for the school in question. The plaintiff sued for an injunction against the board and the new teacher. An injunction granted by the trial court was dissolved by the court of appeals, for the reasons above discussed.¹

A second Kentucky decision holds that although an older section of the school law authorizes the county board to conduct an election for a local tax levy which may include provision for transportation of pupils, this procedure is not a mandatory condition precedent to the uniting of subdistricts as provided for in the code of 1934; and a court decision on this point prior to the enactment of the code of 1934 is no longer binding upon the county board concerned.

This opinion also construes the present Kentucky law as absolutely requiring the county board to provide transportation for pupils in the elementary grades not living within walking distance of a school, but transportation of pupils in other grades is discretionary with the county board.²

Is Statutory Duty

A somewhat unusual case was the occasion that called forth a declaration from the supreme court of Iowa that transportation of all pupils who live more than one mile from a school is a mandatory duty which a school district in that state cannot evade.

It may be news to the reader that a part of the state of Iowa lies on the west bank of the Missouri River, but such is the case. Prior to 1903 a shift of the channel eastward cut off a portion of Woodbury County, but this land is still in Iowa notwithstanding. In 1914 a consolidated school district was formed in this region. Most of the district lies east of the river, but the west boundary of the district is the west boundary of the state. Hence the transiparian fragment is a part of the district, and children residing there are entitled to

transportation because there is no school within one mile of their residence.

Transportation to the nearest school in the district would involve a distance of some thirty miles, in two states—northward in Nebraska to the Sioux City bridge, thence southward in Iowa to the school. For a time prior to 1930 the district board solved the difficulty by negotiating a voluntary agreement with a Nebraska school board, whereby the pupils were permitted to attend school at Homer, Neb., with both tuition and transportation charges paid by the Iowa district.

After 1930 the district refused to pay the transportation charges, and a recent suit was brought by the parent to recover transportation costs thereafter paid by him. He won his case.

The court held that the absence of a written contract binding the district for the transportation was immaterial, for the basis of the suit was not a breach of contract, but the district's failure to perform a duty laid upon it by statute. Furthermore, the defense that the district could not incur liability for transportation outside the state was of no avail, for the provision of a school, wherever it may be, carries with it the duty of providing transportation.³

Litigation Over Contracts

Massachusetts statutes authorize local school committees to contract for the transportation of pupils for a period not to exceed three years, and within this limitation large discretion is left to the committees. No particular procedure involving competitive bidding is required.

It seems that in the town of Methuen, where a local bus company had transported all pupils under a contract for some years past, a number of citizens became interested in the feasibility of a municipally owned school bus system. Accordingly the town meeting of October, 1934, voted to have a special committee study

this subject and report at the next annual meeting.

Meantime, in December of the same year the school committee entered into a new three-year contract with the local bus company, evidently not being interested in the possibility of inaugurating a municipal system. Thereupon a group of taxpayers joined in a suit for an injunction against the performance of the new contract, alleging that it was invalid because the price was some 30 per cent higher than the next highest bid, and because the so-called "bid" was in fact not an acceptance of the school committee's specifications, but was a counter-offer which the school committee had accepted.

School Committee Upheld

The injunction was denied, on the ground that under the statutes the school committee has a right to reject all bids and award the contract to anyone, bidder or nonbidder, and the town meeting cannot compel the school committee to limit the contract to a period shorter than three years.⁴

It appears that Louisiana statutes place no limit on the duration of school transportation contracts. Hence when a parish school board employed a bus driver to furnish his own vehicle and transport high school pupils over a specified route for a period of four years, and accepted his services for two years, then arbitrarily refused to deal with him further and turned the work over to another, he had a right of action for breach of contract.⁵

The matter of transportation contracts will probably continue to vex school boards for a long time, though the consensus of professional opinion already seems to indicate that, for the performance of the important duty of transportation efficiently and economically, the better plan is for the district to own its own vehicles and operate them with a staff of carefully selected employees who are a part of the public school organization.

¹County Board of Education of Bath County et al. v. Goodpaster, (Ky.), 84 S. W. (2d) 55 (1935).

²Ex parte Board of Education of Montgomery County, (Ky.), 84 S. W. (2d) 59 (1935).

³Dermitt v. Sergeant Bluff Consolidated Independent School District, (Iowa), 261 N. W. 636 (1935).

⁴Wilson et al. v. Browder et al., (Mass.), 197 N. E. 26 (1935).

⁵Newchurch v. Ascension Parish School Board, (La. App.), 161 So. 889 (1935).

Local Word Book Reduces Need for Teacher-Help in Early Grades

By GARNETTE WATTERS

TEACHERS, parents and others concerned with child training generally agree that the rapidity with which children become independent and assume responsibility for teaching themselves is a measure of adult success in guiding children.

This means for the teacher that she must help children develop powers of initiative, self-direction, self-appraisal and self-reliance. With this as a premise, we must turn our attention to developing methods and devices that will aid her in accomplishing this purpose.

Self-Help Is Desirable

Certain basic concepts must be recognized as preliminary to such a program. First, the beginning years of a child's life are the crucial years and the service which we render him at that time may influence his behavior throughout his entire life. Second, the small child is capable of directing his affairs and teaching himself many things.

When children in the primary grades want to know how to spell a word, they consult their teacher. If they have an occasion to write a word and are unable to do so, they again seek teacher-help. In their reading activities where they want to know what a word is, they rely upon the teacher for assistance which might be obtained independently if a self-teaching device were available.

Out of a situation such as this there arose in our schools in Hamtramck, Mich., a growing need for a self-help device, which eventuated in a source book or an extensive word book for children's use.

The words in the source book are to be carefully presented by pictures,

print and script in ways that will make it possible for young readers to find meanings for unfamiliar symbols, to discover new words related in meaning and spelling to known words, and to adventure on their own initiative in all their activities of language.

This decision to formulate a word book brought about the question of which words the children need in carrying out their daily activities. In our community the children are slightly retarded in reading, are of foreign parentage and have a language handicap.

The purpose of the search for words was explained to all the first and second grade teachers in the six elementary schools in the system. Each teacher in turn explained it to the children and stimulated them to aid in the collection of words by bringing to her all words with which they had difficulty in their language or other school activities.

Compiling the List

Each time a word was taken to the teacher, she recorded it on a card especially designed for this purpose. Other data recorded were the grade, the diacritical marking, frequency of use in reading, writing or conversation, the exact situation in which the word was used, and suggestions as to how the words might be illustrated pictorially.

The collecting activity was extended to the art, music, nature study and other special rooms in order to get a complete picture of the situation by securing as many of the special sub-

ject words as could be obtained. Analysis of the written work of the children, words from the local spelling course of study, and words submitted by special subject supervisors as those words pertinent to the various fields of activities were other sources from which words were gathered. An attempt was made to record the words used orally.

Checked With Other Lists

At the end of the year all the cards were collected and the words assembled into a composite list, which consisted of 1,344 basic words and 1,840 variants.

To determine the extent and importance of the list of words submitted, the composite list was checked against three standard lists: (1) "A Reading Vocabulary for Primary Grades" by Gates; (2) "The Commonest Words in the Spoken Vocabulary of Children Up to and Including Six Years of Age" by Horn and Packer, and (3) Thorndike's "Teacher's Word Book," consisting of 10,000 of the most important words.

To discover the extent to which the local word list contained the words used in the various readers utilized in the system became the next problem.

Thirteen series of readers including forty-six books were analyzed to discover with which words a child comes in contact during his reading activities. The vocabulary of each book was then checked against the local word list.

It was found that only 52 per cent of the words from one reader appeared in the local word list while

all the words from three other readers were found in the list. The average percentage of words from all the readers that appeared in the local list was 85.4 per cent. There were 2,295 words more in the readers than there were in the local word list.

It was evident that the local word list was not extensive enough to care for the reading needs presented in the readers. However, to add 2,295 words to the original 3,184 word list would, when incorporated into the word book, make such a voluminous book that it was feared the children would not be able to use it effectively or efficiently. However, it was evident that some words needed to be added to enable the source book to fulfill the intended purpose.

It was then necessary to determine the importance of the 2,295 words from the readers. They were also checked against the Gates, the Horn-Packer and Thorndike lists and a distribution was made to show in how many books the different words appeared.

Because the local word list contained so many words from the Gates and Horn-Packer lists, it was not to be expected that many of the 2,295 words would appear in these lists. However, 218 of the words or their derivatives were found in the Horn-Packer list and 57 were found in the Gates list. Three hundred ninety-five of the words were not found in the Thorndike list and thirty-nine of these 395 words have come into usage with the industrial age.

Examples of these are: automobile, gasoline, aviator, propeller, airport, broadcasting, microphone.

Criteria Were Set Up

It was further found that only one of the 2,295 words appeared in as many as seventeen of the forty-six readers, while 1,520 words appeared in single readers. Arbitrarily it was decided that in order to be added to the local word list, words from the 2,295 book list should comply with one of the criteria we had set up.

Application of the criteria to these words revealed that there were 708

ADEQUACY OF THE LOCAL WORD LIST TO SERVE THE READING NEEDS
PRESENTED IN THE THIRTEEN SERIES OF READERS ANALYZED ORIGINALLY AND
AFTER THE ADDITIONS WERE MADE

Series	Number* of Words in Series	Common to Series and Orig. Local List	Words Added After Applying Criteria	Words Appearing in Final Local List	Percentage of Words Common to Series and Orig. Local List	Percentage of Words Appearing After Applying Criteria	Per Cent of Gain
1. Study Readers	1753	1419	153	1572	80.9	89.6	8.7
2. Work Play	1906	1666	137	1803	87.4	94.6	7.2
3. Elson Basic	1012	900	62	962	88.9	95.0	6.1
4. Child Story	2515	1954	275	2229	77.7	88.6	10.9
5. Bolenius	1462	1044	178	1222	71.4	83.5	12.1
6. Child Library	1076	946	66	1012	87.9	94.0	6.1
7. Do and Learn	3005	2479	274	2753	82.4	90.0	7.6
8. Fact and Story	1332	1037	118	1115	77.8	86.7	8.9
9. Children's Own	2005	1731	131	1862	86.3	90.1	3.8
10. Newson	2122	1761	180	1941	82.9	91.5	8.6
11. Winston	2360	1908	252	2162	80.8	91.1	10.3
12. Picture Story	704	694	4	698	98.5	99.0	.5
13. Curriculum	1718	1617	47	1664	94.1	96.9	2.8
Foundation Series							

*The count of words may not correspond exactly with the author's count. No consideration was taken of words duplicated in the different books of any one series. Names of persons were not included in the count.

basic words and 312 variants which complied with at least one of the criteria. Addition of these to the local word list increased the number of basic words to 2,052 and the number of variants to 2,152, a total of 4,204 words. It further brought about increases in the percentages of words common to the local word list and the individual readers ranging from 0.5 per cent to 12.1 per cent. The original local word list contained an average of 85.4 per cent of the words from the readers. After the additions were made, it contained an average of 91.4 per cent of their words.

The close correspondence of the local list and the Horn-Packer list would lead to the conclusion that the local word list is adequate to serve the conversational needs of children up to and including six years of age.

The great number of words common to the Gates list and the local word list would indicate that the local word list is extensive enough to care for the reading needs of children provided authors have used the Gates list as a basic guide. However, examination of the vocabularies of the forty-six books revealed that the authors have utilized practically all of the words in the Horn-Packer and the Gates lists and have extended the word experiences of children far beyond those provided for in these two standard lists through the use of many additional words. It is evident that opportunity for experiences far

beyond those which children would have locally have been provided for in the beginning books.

While the majority of the words used in the reading books are found in Thorndike's most important words, there is a slight tendency to depart from the 10,000 most important words found in the Thorndike list in the reading books. As some of the words have come into frequent usage as a result of the industrial age, it would seem that perhaps there is a need to bring the standard word lists up to date if they are to function as reliable guides for writers.

Because 1,520 of the 2,295 words found in the readers were used only in single readers, it may be implied that there are too few words common to the various beginning readers.

The words we added increased the average percentage of words common to all the reading books and to the local word list from 85.4 to 91.4. From this it may be inferred that the need for teacher-help has been reduced greatly and the opportunity for self-help on the part of the child has thus been correspondingly increased.

Ninety-one and four-tenths per cent of self-help is perhaps all that can be expected of children of the age and maturity of those found in the first and second grades.

The fact that so great a number of words appeared in the readers but did not occur in the local word list

may be attributed to one or more of the following factors:

1. The children were able to get the words from the context, thus not requiring teacher-help with the words.

2. The children are slightly retarded in reading.

3. The children who might have had difficulty with those words did not attempt reading difficult books.

There was a close correspondence between the Horn-Packer list, the Gates list and the local word list. If these standard lists are representative of the vocabularies of children of various nationalities and of normal reading abilities, the implication is that the language handicap and the slight retardation in reading do not influence greatly the range of words

used by children in the early grades.

It is believed that a composite of the local word list and the words from the books that comply with the criteria will serve adequately the local reading, writing and conversational needs of the children in the first and second grades.

It is not expected that any one child will learn all of the 4,204 words, nor is it intended that the words will be put into the hands of the children as something to be learned. However, it is expected that their incorporation into the pictorial word book for self-teaching purposes has done two things: it has provided opportunity for the maximum of self-help and has reduced to a minimum the need for teacher-help.

4. Creation of a district or local chapter as the basic unit of the association. Ninety-eight district units have been organized. In most instances the boundaries of the districts are the same as the boundaries of the city school systems or the counties. In sparsely settled areas, two or more counties form one district unit.

5. Reorganization of the representative assembly, the legislative and controlling body of the association. Delegates to the representative assembly are elected by the district units on the basis of one delegate for every 200 active members and/or major fraction thereof. The assembly elects the president, the board of directors, and four members of each of the six divisions. The president is elected for a term of one year, but directors and members of divisions will hereafter be chosen for three-year terms. The members of the board of directors and the chairmen of the divisions are ex officio delegates to the representative assembly, without voting power.

6. Organization and administration of the convention programs for the general membership on a basis entirely separate from the district unit. For convention purposes, the state is organized into eight regions; each chooses its program officers.

7. Other administrative machinery includes an executive committee of three board members as the ad interim committee of the board, and a coordinating committee composed of the board of directors and the chairmen of the six divisions.

The association has launched forth on its eighty-fourth year of existence (having been organized October 12, 1852) with a program for 1935-1936 based upon two major objectives: (1) the advancement of public education through improvement in public relations, curriculums, organization, teacher training and personnel, and (2) the obtaining of greater social security for teachers by means of tenure during efficient service, reasonable compensation, and the same social and civic rights for teachers as are enjoyed by citizens generally.

Michigan Teachers Reorganize

By ARTHUR H. RICE

SEVERAL innovations in the structural pattern of a state educational association have been put into effect by the Michigan Education Association, an organization of 28,000 Michigan teachers. Reorganization of the association, under the provisions of the revised constitution adopted last March, was completed at a special meeting of the association's representative assembly in Lansing last autumn.

Significant changes in procedure or organization, under the revised and amended constitution of the M. E. A., include the following:

1. Classification of membership under five categories, with active membership limited to those who receive compensation for educational work. Life membership is now available only to those who are eligible for active membership. Lower fees are collected for associate, student or annuitant memberships. Only active members may vote or hold office.

2. Election of all officers of the state association except the president by the Hare system of proportional representation. The Hare system enables a minority group to obtain representation.

3. Elimination of standing and special committees and commissions and the substitution of six planning divisions. These divisions are to exercise general advisory and supervisory direction of major association activities in the fields of legislation, public relations, publications, professional problems, program planning, and finance and membership. Each division has nine members, four of whom are elected by the representative assembly for two-year terms. Four other members for four-year terms are appointed by the executive committee with the approval of the board of directors. The ninth member of each division is appointed from the board of directors. Staff members are assigned as division secretaries.

Happy to Say

By WILLIAM McANDREW

DON'T try to deny that we have fads and frills in school. Boast of it. What is a frill? A something that adds beauty to an otherwise plain performance. What is a fad? A substitute for stupid boredom. Who are the whiners about fads and frills? Those who have yet the awful strain of early Americans who suppressed their brightest men and women, burned witches, hanged Quakers, made human happiness a sin and held that children are conceived in iniquity, are doomed to perdition and that the more disagreeable school is the better discipline for the soul.

A SUPERINTENDENT likes to be called a good business man. No doubt a physician does, too, but each owes his fealty to something more important. The main business of a superintendent is not buildings and supplies. These are supplementary. A need for improvement in instruction is the chief reason why there are superintendents, and this need is one of the things most easily neglected. The jog into real superintending has not come from school boards but from superintendents.

I HAVE noticed a great change in fifty years that is to the credit of school-masters. Nowadays every superintendent of schools regards himself as a dispenser of cheer.

THE enjoyment of singing and speaking about "my country" is a sort of lazy escape from responsibility. My country is so great and I am so small that I feel slight urge to do anything for it. For practical purposes I ought to substitute "my community."

INSTEAD of the present get-nowhere patriotic exercises, a weekly quarter of an hour discussion of "my community's needs" would give the present flag salute something to lead up to.

NO FUNCTION of a superintendent seems to me so important as that of improving the work of those for whom he is responsible. Recording this advance by figures and graphs is highly contributory to gains. When you make a practice of recording your own professional growth you are joining a brotherhood of masters reaching from Pythagoras to Franklin and beyond.

AS I recall the superior teachers I have known, all but two were good laughers. Maybe these two laughed internally. If you have read Dr. James J. Walsh's "Laughter and Health," you will feel justified in requesting certain teachers in your staff to reserve a space in the classbook for recording at least one of their own hearty laughs each school session. If one doesn't feel laughy in school it's a sign he needs to. Forced laughs grow spontaneous.

FOR years you have tried to impress the belief that it's no disgrace to be poor. The Carnegies, Rockefellers, Insulls, Vanderbilts, Goulds and other national idols had such a hold on the popular mind that your teaching got nowhere. Luck is with you at last. The country is so well supplied with bright poor people that poverty is respectable and you no longer have to teach this fact.



THE SCHOOL PLANT



Utility Typifies Modern School Equipment

By GEORGE A. PERSELL

THE contrast between high school architecture of a century ago and architecture of the present day is as great as the contrast between the oxcart and a 1936 model car.

The factory-like buildings of the early eighteenth century and the ornate ugliness of a later period have given place to simple classical lines which satisfy the esthetic nature and produce buildings that are an asset rather than a liability to the neighborhoods in which they are located. Cities are coming to believe with Keats that "the beautiful is as useful as the useful" and are attempting to make their school buildings places not only of utility but of refinement.

On Nov. 15, 1935, there was dedicated in the city of Jamestown, N. Y., a high school building that embodies to an unusual degree the elements of beauty and utility. The citizens demanded by an overwhelming vote that their central high school should be located in the heart of the business section of the city on the site of the old high school, which had become hallowed by long association, and that fact presented some rather difficult problems for the architect to solve. That the problem has been solved successfully is granted by all who have seen this modern structure.

The building occupies an entire block stretching along one of the

busiest thoroughfares of the city. It is three stories in height in front and four stories in the rear owing to the slope of the ground. The type of architecture is strictly modern, the brick is buff, and the general effect is restful and satisfying to the eye. The structure is fire-resistant throughout, steel being used not only in the frame but in the window casings, door jambs and much of the trim.

In general layout the building is divided into three sections. At the west are the classrooms, study halls, library, laboratories and offices. To the east of these and forming almost a unit by itself is the section contain-



Jamestown High School is handsome without and unusually well equipped within. Above are the office practice and sewing rooms. Below is the tastefully furnished living room of the home-making suite.



ing the auditorium, gymnasiums and music room, and still farther east is located the industrial arts section.

This grouping has several advantages. It removes the noise of the shops, the music room and the gymnasiums from the classroom section and makes possible the use of the auditorium at any time of day by outside organizations without interfering with the activities of the school.

Heavy gates are provided to shut off the corridors of the classroom section from the auditorium and gymnasiums so that night activities can be carried on without trespassing upon the main part of the building.

Emphasis on Industry

No pains were spared in planning this building to make it adaptable to the needs of the community. Jamestown is essentially an industrial city. For this reason considerable money was spent to make the industrial arts section of the plant complete in all details. The types of work carried on in the factories of the city were taken into consideration in planning the various shops, and while utility was not the main objective it was felt that this feature should not be entirely overlooked.

Half a century ago the first superintendent of the Jamestown schools, Samuel G. Love, introduced manual training into the schools, and in 1887 published a book setting forth his plan for industrial education. The work begun at that time in a small way has grown until at present it forms one of the principal departments of the high school.

The industrial arts building is fully equipped with modern machinery for wood work, metal work, electrical work and auto mechanics. Next year a well equipped print shop will be added to this equipment. Two well appointed drafting rooms are provided and the type of drafting taught has been correlated with the types of drafting used in the factories of the city.

This section of the school plant

will easily house 450 pupils and could be made to house 485, if used to capacity. This excellent provision for industrial arts work meets a definite public need. Many of the boys who take the courses offered find employment in the factories of the city, and those who take the courses with no utilitarian objective often develop avocations that result in the worth while employment of leisure time.

Music has assumed such a commanding position in the high school that it was felt necessary in planning the new building to make adequate provision for this cultural subject. Accordingly a choral room has been placed off the corridor connecting the classroom section with the industrial arts section. All the practice work of the band, orchestra and glee clubs is confined to this room and thereby is so isolated from other parts of the buildings that no annoyance is experienced from the noise of these activities.

This room has raised tiers of seats arranged in a semicircle and will accommodate 100 for practice. The room is convenient to the stage of the auditorium so that little confusion arises in getting the musical organizations to the stage at public entertainments. Adjoining the choral room are storerooms and offices for the director of music.

Housekeeping Suite Popular

At a recent public inspection of the building the most popular section of the plant was the domestic science department. The domestic science suite is located on the third floor of the classroom section of the building and consists of two fully equipped kitchens and two fully equipped sewing rooms besides a homemaking suite consisting of living room, dining room, bedroom and bath.

The homemaking suite is furnished with attractive furniture, rugs and draperies and the girls take a real pride in keeping it in perfect order. The kitchens have both gas and electric stoves, the latest types of sinks and cupboards, tubs for laundering the linen used in the kitchen, and all

the utensils commonly found in a modern kitchen.

Sewing rooms are equipped with both electric and foot-power machines, cutting tables, pressing boards, sewing tables and cupboards for storing material. Lockers are provided for the storage of individual pieces of work upon which the girls are engaged, and bulletin boards are provided for the display of work.

The cooking classes are so popular that boys in ever increasing numbers are attempting to register. The girls are given first chance at these courses but if it is possible to accommodate boys this is done. It has been necessary this year to restrict the registration of boys to the junior and senior classes. At present, sixty-seven boys are registered and others are waiting for vacancies.

Commercial Department Largest

Many of the boys seem to have excellent reasons for wanting the cooking courses. Several of the boys intend to become forest rangers, and cooking will be a valuable adjunct to their preparation for this vocation. Others, owing to home conditions, have to prepare their own meals and are anxious to know the proper menus and something about the scientific preparation of food.

The commercial department is one of the largest and most popular in the high school. At present there are between 700 and 800 pupils registered in the various courses. This department contains the customary typewriting and bookkeeping rooms with the usual equipment, also economic geography rooms equipped with large bulletin boards and filing cases for illustrative material. A new course known as office practice has been added this year and is meeting with great favor.

The large room in which this class is housed is equipped with dictating machines and four noiseless typewriters to go with them, six typewriters attached to special desks for advanced secretarial practice, several types of calculating machines and listing machines, a bookkeeping ma-

chine, a mimeograph and mimeoscope, a portable duplicator, and filing outfits for ten pupils. Pupils are trained in the operation of all these machines, also in the use of directories, postal guides and reference books so that they will fit into the offices of the city and be able to do intelligent and efficient work.

In planning the new high school, art work was not forgotten. Two attractive studios with special desks and special steel filing cases for individual drawings, together with abundant storage space for supplies, make these rooms ideal places in which to work.

The library suite has been planned with special care. It consists of two large reading and reference rooms, seating approximately seventy-five each. In one of these rooms the juniors and seniors do their reference work and the other is occupied by the sophomores. The reference books are distributed to meet the special needs of each group. Between the reference rooms are the library stack, the offices and the librarian's work room.

Reading rooms are equipped with tables and chairs and with artificial light so distributed that it is available for all parts of the rooms. The utmost care has been exercised to safeguard the pupils' eyes. The rooms have a southern exposure and an abundance of windows so that the maximum of natural light for this latitude is secured.

Several small conference rooms have been provided in which teachers may take pupils singly or in small groups for special work. An English conference room consisting of a double classroom has been provided for debate practice, rehearsals, committee work and similar purposes. The room is furnished with a low platform at one end and is provided with book cases, tables and chairs. The room affords a place in which pupils and teachers can meet and work under less restraint than is commonly found in a classroom.

The office of the school physician is located on the first floor and is equipped to furnish first aid for the



Modern machinery in the industrial courses helps train boys for work in local factories. Even in the chemical laboratory (right), the types of work carried on in Jamestown factories are considered. The choral room, below, is isolated and accommodates 100 for orchestra practice.





The library suite comprises two large reading and reference rooms. Each seats seventy-five pupils.

accidents that commonly occur around a school plant. Adjoining this office is a first aid room provided with a cot and warm blankets where pupils who have become suddenly ill or who are suffering from the results of an accident can be taken until other provision can be made for their care.

Similar first aid rooms are located on the second and third floors so that easy access to one of these rooms can be had from any part of the building. In the doctor's office also is located a modern device for testing eyes, storage space for medical supplies, and filing cases for health records.

Three Gymnasiums Provided

A cafeteria with seating capacity of 800 is located in the basement of the building but has not been fully equipped as yet. Pupils who bring their lunches are accommodated at present and several of the teachers have made arrangements to get warm lunches in the cafeteria.

The importance of physical training has long been recognized in Jamestown, and in building a new high school careful attention was given to this school function. One large gymnasium, 80 by 80 feet, furnishes a regulation size basket ball

court and can be divided by a folding partition into two gymnasiums, 40 by 80 feet, for class purposes.

In addition to this, a smaller gymnasium, 35 by 68 feet, has been provided for correctional work. This has been liberally equipped with apparatus especially helpful in this type of work. Games of a less strenuous sort than those played in the regular gymnasium have been supplied generously. The room has a southern exposure so that it is flooded with sunlight, and every care has been exercised to make this an ideal place in which to do corrective work.

Probably the most attractive part of the new high school plant from an artistic point of view is the auditorium. This will seat 1,631. The seats are of the opera type with upholstered seats and veneer backs. The stage is ample and is fully equipped for dramatic work. Lighting arrangements give exceptional effects and the decoration of the auditorium is beautiful.

The auditorium will be a great asset to the community because prior to the building of this auditorium there was no adequate space available for the use of the musical and dramatic organizations of the city. The auditorium is equipped with a

public address and radio system, which is connected with all parts of the building. From a central station it is possible to communicate with every classroom, study hall and pupil station in the building, and thus save time in getting notices to the entire student body.

The office suite, which faces the main entrance to the building, is equipped with the latest type of metal desks, filing cases and counters. The east corridors of the classroom section are amply supplied with display cases. Individual steel lockers for the pupils' wraps are located along the corridors and form a part of the general scheme of decoration. The locker rooms are supplied with steel lockers as are also the team rooms. All the material and equipment have been selected with the utmost care, and the building is a model in construction and furnishings.

One important feature that has been embodied in the new building is the acoustical treatment of classrooms, library, study halls, gymnasiums, and in fact all rooms where noise would hamper the efficiency of teaching. The fact that the building is located in the heart of the city rendered this treatment necessary. It is proving successful and removes much of the strain on voice and nerves in the course of the school day's work.

Registration Jumps

The high school has been built to accommodate 2,600 pupils and now has registered between 1,900 and 2,000. In addition to the day school registration more than 2,000 adults are attending the evening school classes three nights a week. For about thirty years Jamestown has had a thriving night school but this year, owing to the new building with its added facilities, the registration has surpassed by nearly 600 all previous years.

As an educational plant the new building is functioning splendidly. The pupils like it, the people like it, and the city is proud of it.

Setting the Small Auditorium Stage

By T. RYLAND SANFORD, JR.

THE completion of a new wing to the Hilton Village Elementary School, Warwick County, Virginia, comprising an auditorium and four classrooms, meets a real need in a growing community of approximately 1,600 people with an elementary school population of about 350 pupils. Constructed and equipped at a cost of \$37,000, the auditorium contributes definitely to the needs of the community and to the cumulative growth of the broader concepts of education.

Before entering this complete assembly hall with its stage and dressing rooms in the basement, interest focuses upon the function of the auditorium. Its contributions to the school and to the general scheme of education as a whole must be considered. In eliminating the point of view that the auditorium exists as a separate part or individual factor in

the school organization the position is taken that it merges with the total school and with the total school program. Its contributions to the educative process are measured by the progress and social outcomes exemplified by the school as a whole.

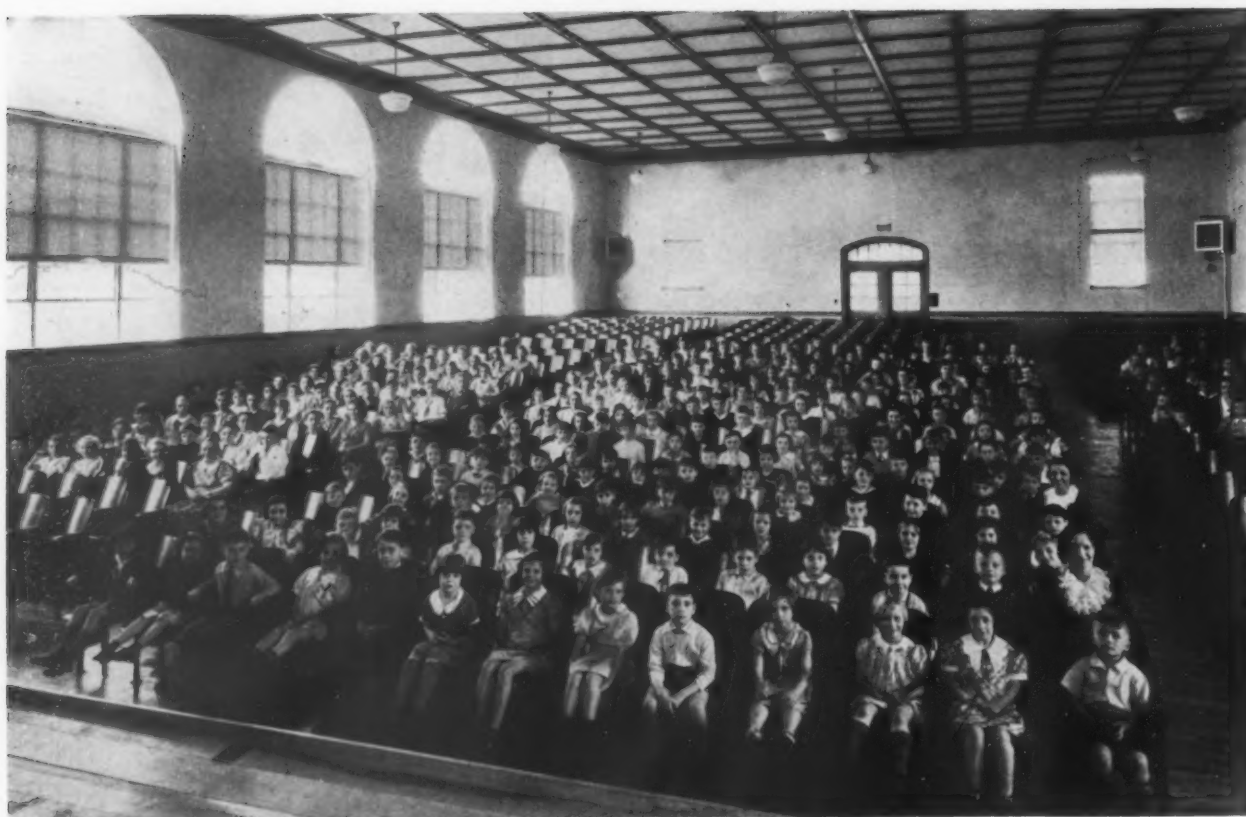
The elementary school auditorium is an agency to be used as a means of teaching through activity and experience. Assembly programs consisting of dramatics, rhythmic, musicals and allied demonstrations should not be presented as unrelated parts of the school program or as extracurricular activities. With the constant and improved revision of the curriculum, the extracurricular activities as such are rapidly becoming absorbed.

As the practice of teaching unre-

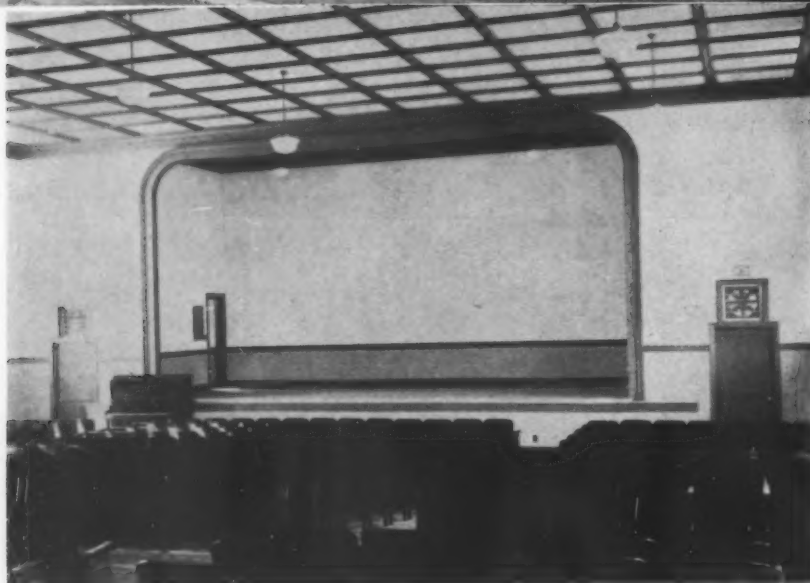
The part that the school auditorium plays in a growing community of approximately 1,600 people, with an elementary school population of 350 pupils, is clearly described by T. Ryland Sanford, Jr., superintendent, Warwick and York County Schools, Denbigh, Va. Following his interpretation of its needs as applied to progressive education, he invites inspection of the new Hilton Village assembly hall



The new auditorium with four classrooms forms a wing of the main building.



Ready and waiting for the curtain to rise! An expectant audience is assembled in the newly erected Hilton Village Elementary School assembly.



lated subject matter is discontinued, as the interrelationship that exists between the various subjects is recognized, and as the value of integration with respect to subject matter, curricular activities, and so-called extracurricular activities is recognized, the school better prepares itself to contribute to the inevitable changes of the social order.

It thus becomes necessary to dedicate the elementary school auditorium to a more adequate use and a

keener appreciation of its value in obtaining purposeful growth of modern youth. Some of these purposes follow:

1. The auditorium offers an excellent opportunity to promote a closer and more harmonious understanding between the community and the school. The relationship that exists between the activities of the community and the activities of the school is integrated through a cooperative spirit that leads the community and

school to share mutually in many of their respective activities.

2. The auditorium is a medium of exchange and a place for the promotion of shared activities among the various grade groups within the school. Various projects and activities that have been developed by one grade are produced for the entertainment and growth of the whole school.

3. The privilege of hearing and observing the performance of others improves the expected standard of performance and should serve as a stimulus that will lead to a desire for continuous improvement.

4. The use of auditorium activity programs leads to the development of more purposeful programs.

5. Through the use of well chosen and developed auditorium activities ultimate growth of esthetic appreciation of music and its relation to the art of living may be expected.

6. Auditorium activities afford an

excellent opportunity for the development of creative expression through depictions of many of the fine characteristics of music, dramatics and art. These are the creations that embody much of the beauty and charm of those higher levels of development that are objectively sought by the preponderance of society and education.

The auditorium of the Hilton Village Elementary School is 52 by 90 feet and has a seating capacity of 634. The stage is 30 by 16 feet and is provided with a footlight trough. Dressing rooms, measuring 17 by 15 feet, are located in the basement. This plan was followed so that greater stage space would be available. A room, 52 by 33 feet, has been provided in the basement, which may eventually serve adequately for cafeteria purposes.

Auditorium chairs are of the direct ball bearing hinge type, 7-ply $\frac{3}{4}$ inch back, and 5-ply $\frac{7}{16}$ inch thick seat.

Window shades for the auditorium windows are of the single roller type, duck cloth, solid tan color. All other window shades are of the double roller type with double cord, duck cloth, solid tan cloth.

The heating system is connected to the plant in the original building, which is a one-pipe low gravity steam system. Two sections were added to the present boiler to take care of the additional heating load. The auditorium is equipped with four unit heaters. The heaters are provided with three-speed starting and regulating switches mounted in the side wall adjacent to the units.

All walls are plastered with three coat work, sand floated finish. The ceiling of the auditorium and stage is covered with $\frac{1}{2}$ -inch building board symmetrically paneled with wood mold. This type of ceiling has been used to provide satisfactory acoustics.

Electrical fixtures are particularly attractive. These are attached to 4-foot pendants extending from the ceiling. A motion picture booth outlet is located in the rear of the auditorium properly wired and arranged

to accommodate a picture machine.

The floor of the auditorium and stage is tongued and grooved, end-matched, second grade hard maple, 25/32 inch thick. The floors are machine sanded to a smooth finish and two coats of approved floor varnish have been applied.

There are six attractive auditorium windows, 8 feet 11 inches wide by 10 feet long. These are of the projected metal sash type with bronze hardware. All interior woodwork is finished with a three-coat stain and varnish.

Thirty per cent of the cost of construction and equipment of the audi-

torium wing was paid by the Public Works Administration in accordance with the grant agreement executed between the county school board of Warwick County and the United States government.

Plans and specifications were prepared by the division of school buildings, state department of education at Richmond, under the supervision of Raymond V. Long, director. The building was constructed under the supervision of the division of school buildings and the PWA. Inspectorial service was provided by the PWA and the county school board of Warwick County.

An Old Painters' Custom

The old painters' custom of using starch or buttermilk over the final coat of paint or glaze is one well worth perpetuating, in the opinion of George Diehlman of the National Lead Company laboratories.

The procedure served several purposes, Mr. Diehlman points out. It was an aid in getting uniform flatness which rendered brush marks and shiners inconspicuous. It protected the paint film from dirt and discoloration. Because it was water soluble, it was easily washed off, leaving the paint with its original brightness and good appearance. In many cases when the walls were not cracked or the paint badly marred, all the painter did to complete the job was to apply another coat of starch or buttermilk.

Except among decorators who wish to protect the more costly decorative effects, this practice has largely been discontinued in recent years, according to Mr. Diehlman. He believes, however, that the great increase in the use of paint on plaster and the higher labor cost of today should make the use of starch sizes on wall paint coatings more popular.

It should be understood, of course, that all wall paints are not susceptible to a satisfactory washing even

when protected by starch or buttermilk size. However, where white lead and a flattening vehicle make up the paint, the renewal of the surface appearance by washing is feasible.

Starching, while not essential on white lead flat paints, has the advantages before mentioned of giving softening effects in the paint or decoration and rendering less noticeable small imperfections in application. The same procedure is employed where starch is to be used for overcoating purposes, as in making flour or starch paste. However, it should be thinned somewhat for use as a size, to permit brushing out in a thin film.

Occasionally, in applying starch solution or buttermilk over painted walls, one encounters a surface tension effect where the liquid is drawn from the immediate surrounding area into large droplike pools, thus leaving uncovered portions, the general effect being like drops of water on a buttered dish. This so-called crawling phenomenon can be overcome by adding about eight ounces of soap flakes to each gallon of starch solution (or buttermilk) and stirring until the soap is completely dissolved. This mixture, when applied, will usually be found effective.



A well planned planting marks the school entrance, Linn Grove, Iowa.

FORTUNATE indeed is the community in which the school grounds have been properly planned. Even more to be envied is the community which has had the grounds planned before construction of the building was started. While admittedly a desirable thing, yet it seldom happens, particularly in smaller towns.

Proper planning pays big dividends. We see examples of this in all walks of life. On the school grounds, planning provides for efficient use of available space, future developments, safety and better supervision of playground activities. It reduces maintenance costs and results in a beautiful school, an asset to the community.

Advance planning of this sort is perhaps rare because the public in general is not aware of the value of the professional landscape architect's services.

Plans for the building itself are usually drawn up in great detail by an architect and checked many times by the school board so as to ensure a working unit, but what of the grounds? The answer, in most cases, is obvious, "They just happened!"

School grounds present numerous

A Plan for Planting

By NORMAN A. MORRIS

planning problems, such as the location of the building, walks and drives, playground equipment, fields for sports, location and selection of plantings, and numerous other problems individual to each property.

These problems cannot be solved individually. Each is a part of a complete whole and it is only by study of the entire unit that a satisfactory arrangement can be obtained.

In planning efficient usable school grounds, it is essential to start with the building location, for the location determines to a great extent the remainder of the plan. The topography or shape of the ground is the first consideration in the building location. This point becomes extremely important on grounds with great variation in levels. On a flat piece of property, however, it becomes relatively unimportant.

There must be kept in mind, when

selecting the site, the possible orientation for the building. This may depend on a number of things, climatic conditions, relationship of the school property to the community, direction of traffic for ease of access, and the amount of car traffic on streets adjacent to the property, so as to plan elimination of traffic hazards.

Walks and drives should be located on the property so as to provide adequate service. It is necessary, however, to keep these at a minimum for oftentimes a great deal of space is wasted in nonessential driveways. Driveways should not interfere with the playground areas or cut between the building and the play areas on the ground. Walks should be direct, wide enough to carry the traffic, and spaced far enough from the building so that foundation plantings will not be unduly crowded.

The last named mistake has been all



Another demonstration grounds in Jesup, Iowa, showing a lovely enframement of the building with trees and foundation planting, harmonious and in scale.

What is accomplished by properly planning school grounds? Mr. Morris, landscape architect of Iowa State College, answers as follows: Efficient use of available space, an outline for future developments, safety for children, better supervision of playground activities, reduced maintenance costs and a beautiful school

too common in the past, and in such cases, it is almost impossible to obtain a satisfactory planting at the base of the building. If such condition exists on older school grounds, it can be overcome by placing the foundation planting outside of the walk, although this is not as satisfactory as having the planting next to the building.

The placing of playground equipment on the average school grounds has usually been a hit-and-miss propo-

sition. As such apparatus is usually used by the younger children, it is desirable to have it in a location distinctly separated from the larger play areas on the ground. This area should be near the school building if possible. These two points will allow for easier supervision by the teachers in charge.

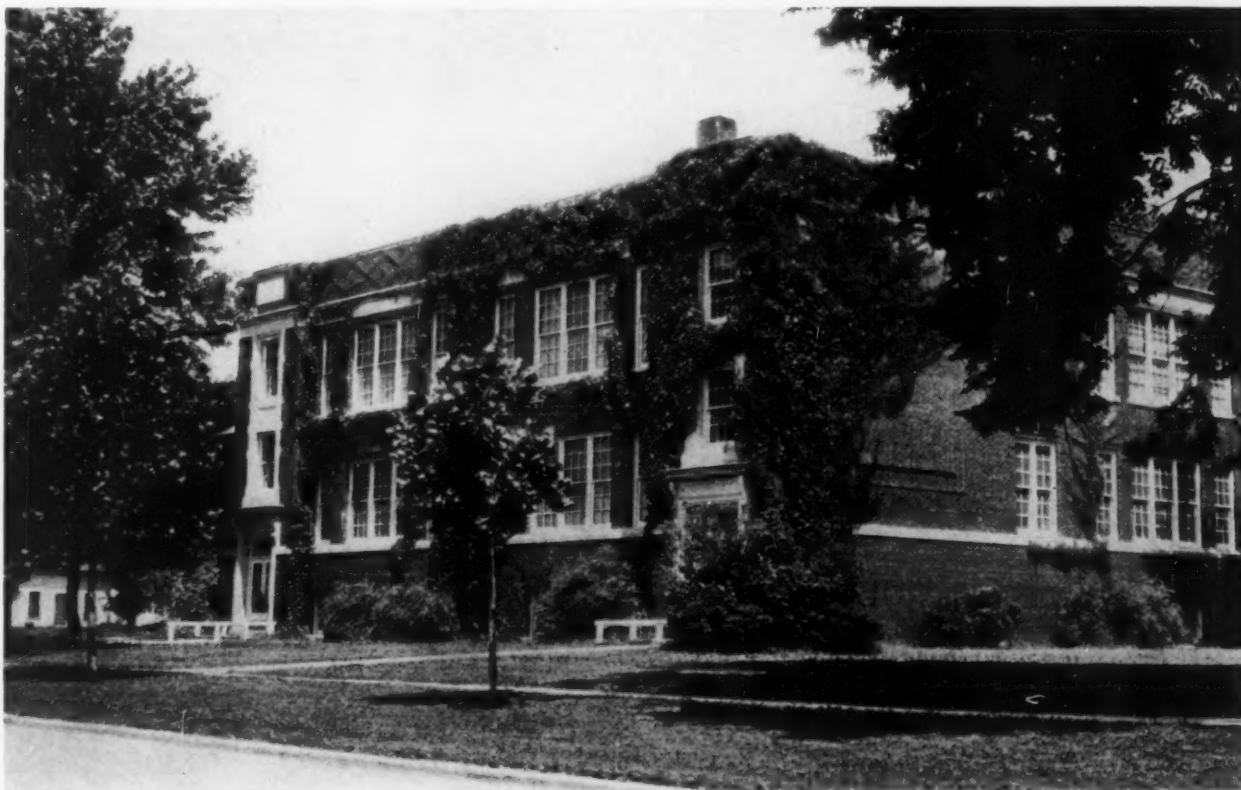
The apparatus should not be crowded, as this condition will increase the possibilities of accidents. Perhaps the most desirable arrangement is to have the equipment around the boundaries of the area with the center open and in lawn. The lawn, of course, may not be possible if the area is small and used intensively. The areas for larger sports must be carefully planned so as to make the utmost use of the available area. The orientation of the different fields also plays an important part in the planning of this area.

Football fields should run north and south, tennis courts should be north and south, and a baseball diamond should be so located that home plate falls at the southwest corner of the diamond. These orientations are

not always possible owing to other influencing factors.

Now for the planting of the grounds. In most peoples' minds, there seems to be the idea that the plantings are of ornamental value only. This is far from being the case. Trees are valuable for their shade and protection. Shrubs can be used to prevent traffic accidents by so locating them as to keep the children in defined areas. Shrubs are useful to keep the children from cutting corners and cutting across lawn areas. Shrubs with fruit are valuable in attracting birds to the grounds. So we might go on citing any number of uses for plants, outside of their value for making the grounds attractive.

When most people think of landscape work, they think of the planting part of the work and its ornamental effects. This is one of the important phases of landscape work and is the part most obvious to the passer-by. Beautiful school grounds are undoubtedly a valuable asset to any community. As a matter of fact, they can be considered as almost a direct reflection of the community.



The beautifully planned school grounds at Dallas Center, Iowa, are the result of a community project.

On school grounds, it is particularly important to keep in mind at all times the function of the grounds. Primarily, the school yard is for recreational purposes, and the planting should be so located that it does not destroy the play areas but rather adds to their usefulness. In the landscape planting, it should be remembered that the planning of these plantings is just as important as the planning of the areas on the grounds.

The building is the object that we are trying to make attractive. This has often been overlooked and plants have been so used that they detract more from the appearance of the building than they add.

In this beautification of the building, it is well to consider four important points: (1) the lawn, (2) the trees, (3) the shrub plantings and (4) the vines. The lawn, of course, is an absolute necessity, particularly in those areas around the building. The lawn provides a nice setting for the building and helps to tie together other plantings of trees, shrubs and vines.

Tree plantings, as have already been mentioned, are valuable for shade purposes and also as protection. Shade is sometimes desired on cer-

tain parts of the building and is particularly valuable in the play area for small children. Many school grounds in smaller towns or in the country are in need of protection from the winter winds. In these cases, an evergreen windbreak would help a great deal in making the school grounds more usable during the cold winter months.

In most of the town schools, a major part of the tree plantings would probably be those along the streets bounding the grounds. Trees for street tree purposes should be those of upright growth with tall trunks and of clean habits. These street trees may be spaced at regular intervals in straight rows on all sides of the property bounded by streets. A spacing of 40 to 60 feet, depending on the trees selected, is most desirable.

From the standpoint of making the school building attractive, the trees should be located so as to afford pleasing views of the school. If the building is close to the street, the street trees will probably serve the purpose of framing views of the building. If the school is farther back from the street, it may be necessary to locate trees out from the corners of the building to serve as a foliage frame for the building picture.

Trees in general should not be planted directly in front of the building unless it is such a large school that it is necessary to break up the broad expanse across the front of the building. Most of the other tree plantings will probably be near the boundaries of the property. Keep the centers open as much as possible for the play areas. Here again, in these boundary plantings, it is important that the trees be properly spaced if they are to be good specimens in later years. Thirty-five to forty feet apart is a minimum.

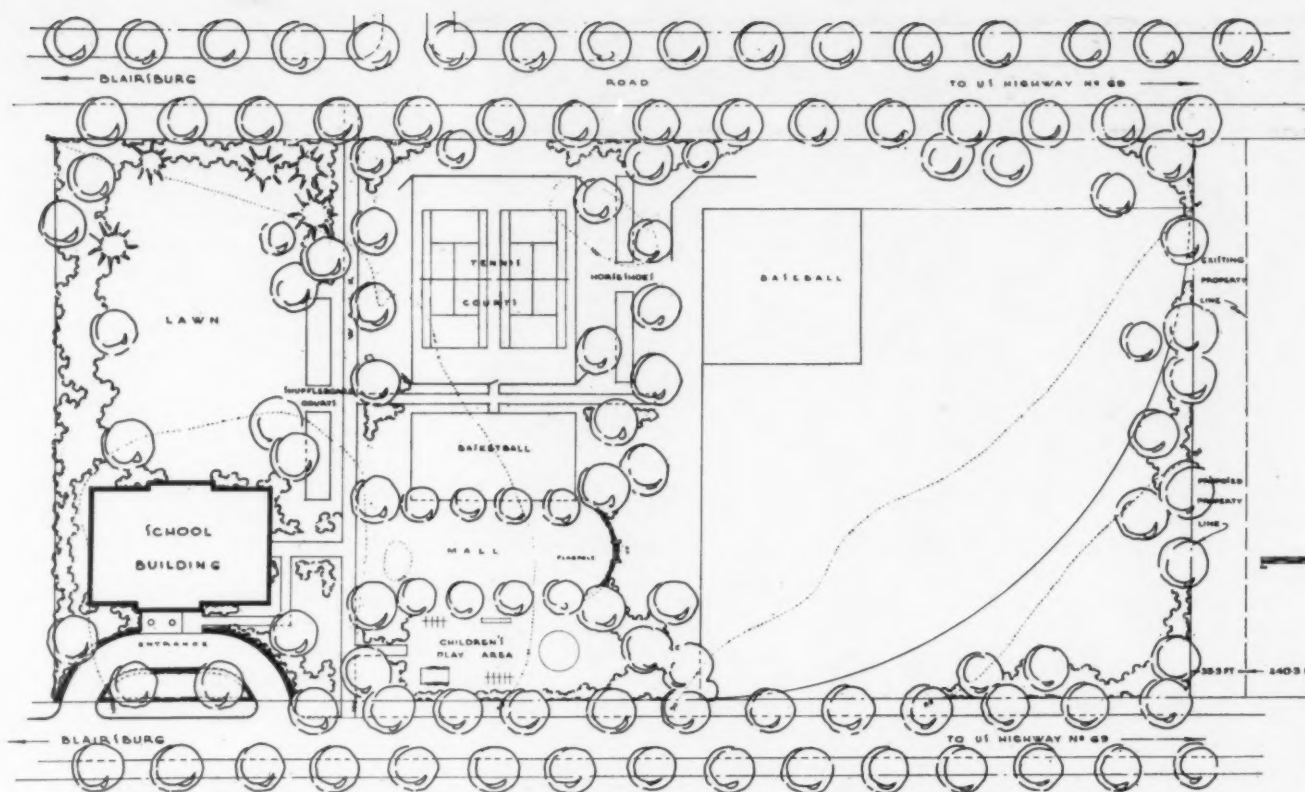
Shrubs have many uses. The foundation planting around the building is probably one of the most important. This planting, will, of course, depend upon the type of building. It should be remembered at all times that the general effect is what counts and that each shrub is just a unit in the entire planting. The shrubs should blend together to form pleasing foliage masses, usually the taller masses at the corners of the building and in large angles. It is not necessary entirely to hide the foundations with plantings. Most buildings appear more pleasing if part of the foundation remains visible.

Care should be taken in plantings near and under windows to select those materials that will not grow too large. Smaller shrubs can be used at the intersection of walks, to aid in the guidance of traffic. Shrubs are invaluable for segregating different areas on the grounds, for example, the bounding of the children's play areas, also as borders along the boundaries of the property. Many times they are useful for screening undesirable views, perhaps of an adjacent alley with unsightly buildings, garbage cans and litter of all sorts.

Vines are effective in helping with the general effect. They form large foliage masses much as do the trees. If the school building is of brick, stone or similar material, climbers will help out a great deal to give a softening effect to the architecture of the building. Of course they should never be allowed to grow rampant so that they hide the architectural



Planting for this school at Laurens, Iowa, was done as a demonstration of school beautification by the landscape extension service of Iowa State College. The vine helps soften the otherwise bare expanse of building.



This design for the Blairsburg school grounds shows careful planning of various areas for convenience, safety, ease of supervision, beauty and saving of space. The plan was prepared by the Iowa State Planning Board.

beauty of the school. Such vines can perhaps be planted at the corners of the building, but again it depends upon the type of building.

A great many plants might be selected for planting on school grounds, but some of them have proved their worth much more than others. In general, use those types that need a minimum of maintenance work in later years, that are perfectly adapted to the climatic conditions and that are good thrifty growers. A plant list always reflects the individual's taste and preference, but the following list, while brief, should give a satisfactory background for plantings on school grounds in the Midwest.

Large trees: American elm, red oak, pin oak, hackberry, sugar maple, Norway maple and American linden.

Small trees: canoe birch, hawthorn and wild crab.

Evergreens: Douglas fir, white fir and Austrian pine.

Of this group, the American elm, hackberry, pin oak and Norway maple are perhaps the best for street planting. It will be noticed that the

recently popular tree, the Chinese elm, has been omitted from the list. Observations made in Iowa have shown this tree to be comparatively short lived (twenty-five years). It could be included in a list for such areas as the Dakotas and Kansas.

Recent checks on evergreen planting in Iowa indicate that the most satisfactory evergreen trees are the three mentioned above. In moister regions near the Great Lakes, some of the spruces and white pine might be added. The Douglas fir and Austrian pine are excellent for permanent windbreak trees.

In the group of shrubs, we could list the following:

Large (over 10 feet): smooth sumac, cranberry bush, wayfaring tree, sweet mock orange and Tatarian honeysuckle.

Medium (6 to 10 feet): coral dogwood, golden twig dogwood, gray dogwood, Van Houtte spirea, Persian lilac, weeping forsythia and Lemoine mock orange.

Small (3 to 6 feet): Japanese barberry, Regal's privet, Peking cotoneaster, Rugosa rose, garland spirea,

Alpine currant and Froebel's spirea.

Evergreens: Pfitzer juniper and Savin juniper.

The most successful vine is the Engelmann's ivy. This vine clings to brick, stone or concrete and needs no support. The Japanese ivy (Boston ivy) is a beautiful clinging vine but not hardy in the North (in Iowa north of Des Moines).

Some vines such as bittersweet or honeysuckle might be used on fences, or possibly on trellises next to the building if there is not sufficient room for foundation plantings of shrubs in certain areas.

Flowers have a limited use on the average school grounds owing to lack of personnel for proper maintenance. Some bulbs and perennials such as tulips, iris and peonies might well be used as an addition to the shrubs in the foundation plantings about the building.

It is well to keep in mind that the planting on school grounds need not be elaborate. By proper planning, we can ensure an effective planting at a minimum expense and upkeep, an important item on any school grounds.

BETTER PLANT PRACTICES • • •

Eliminating "Skin" in Chamois Skins

To get the best service out of chamois skins, according to Jens Flikeid, supervisor of housekeeping, board of education, Minneapolis, one should follow certain set rules.

First, "see whether the skin is of the size specified. Feel whether it is of the same thickness throughout. See whether there are any scars or flaws in the skin that make it hard and stiff in spots. Wet the skin and after bunching it in a haphazard manner, squeeze it with one hand.

"If the skin becomes so soft and sleazy after wetting it that it oozes through the fingers when it is squeezed, it may be a sheep skin, which is not according to the specifications and not a satisfactory substitute for chamois skin. Sheep skin is neither serviceable nor satisfactory for cleaning glass. Observe how much of the natural oil is left in the skin, comparing one firm's product against the standard samples and against each competitive article."

A good chamois skin will outlast a poor one and do more efficient work, Mr. Flikeid remarks. Both are far better than sheep skin or other substitutes.

Better Telephone Service at Lower Cost

Prior to 1934, telephone service in Montclair, N. J., between schools or between schools and the central office was conducted by means of the New Jersey Telephone Company's trunk lines located in each school building.

"This meant," says Fred P. Reagle, assistant superintendent, "that every inter-school call or every call between the central office and the schools was routed through the central telephone company exchange. The cost of this service, when figured in accordance with the contracts in force at so many free calls per month—five cents per call for the next group, and four cents for the next group—bulkied rather large especially because the schools use the telephone extensively in contacting the homes about the absence of pupils.

"As a result of considerable study of the telephone bills paid over a period of years, it was estimated that money could be saved and better telephone service secured by running an extension from the existing switchboard in the central office to each one of the school buildings, thus

avoiding the use of the telephone company's central exchange in talking between schools or between schools and the central office." For the last two years the school system has had more efficient and quicker telephone service at a smaller cost than under the old plan. The telephone company's trunk lines were not removed from the building but were retained for future conduct of telephone business other than that between schools and the central office.

No Winter Blanket Needed for the Lawn

Better have the lawns uncovered during the winter months, according to the best authorities on the subject. Despite the feeling of some that a blanket of manure, straw, leaves, tobacco stems and similar material will protect and fertilize the grass, there are objections to such procedure. It not only tends to make the lawn appear unsightly but may even smother the turf.

It has been found, too, that only small quantities of plant food are added to the soil by manure or other materials put on during the winter, because much of this leaches out or runs off in surface drainage during early thaws. If manure is used, it should be employed only after it has been left to rot under conditions that will conserve the nitrogen supply and kill the weed seeds. Winter mulching with straw or fresh manure is likely to introduce a great supply of weed seeds.

When It's Time to Replaster

In the rehabilitation of a school building, to remove old plaster and replace it with new is an extremely dirty process, according to B. B. Duemke, construction engineer of the Minneapolis Board of Education.

"The old dry plaster creates an enormous amount of fine dust which permeates every part of the building and creates a big clean-up job for the janitors and engineers," Mr. Duemke declares. "It destroys the finish on all woodwork with which it comes into contact. If it gets into the bearings and parts of mechanical equipment, it causes serious damage. The new wet plaster is splashed over large areas and creates another difficult cleaning job.

"Usually the plaster on ceilings of semiwood and brick or stone con-

structed buildings deteriorates faster than it does on walls. Also, where such construction prevails, replacement of small plaster areas is less effective and more difficult to make. For this reason, precautionary measures should be taken for substantially treating the ceilings before any painting is done."

All of this trouble can be easily and conveniently eliminated by applying insulation board directly over the defective plaster, Mr. Duemke points out. The insulation board also possesses valuable and desirable insulating and acoustical properties, especially in corridors and in rooms on upper floors where the attic space is unfinished. The actual cost of replastering, as compared to the application of insulation board, is of little moment as the cost of either process is about the same.

Using the average size classroom and coat room and allowing for material waste caused by uniform cutting for paneling purposes, the cost is:

1,000 sq. ft. insulation board @ \$32	
per M	\$ 32.00
300 lineal ft. battens	} 15.50
180 lineal ft. 2 1/2" crown molding	
40 pounds nails	
82 hours skilled labor @ \$1.....	82.00
Total \$129.50	

Rôle of Custodian Requires Constant Study

Each floor of the school building, each of its four walls—in fact, every article in each room—reflects a different individuality, according to Ervin H. Raum, custodian of the school district of East-town Township, Berwyn, Pa.

"It is the duty of the custodian, therefore, to study and keep in his mind the individuality not only of the surroundings but the individuals themselves and try to afford to provide personal comfort to the occupants," Mr. Raum asserts. "He must arise early and stay late. His first thought on entering the building in the morning is to have it heated and aired or cooled to ensure the health of all. Sometimes when a new individual comes into a room the atmosphere of the entire room must be changed for the newcomer."

The study and effort that the caretaker must bestow on his work apply as well to the materials he uses, Mr. Raum believes. "All cleaners, disinfectants, floor and furniture preservatives must be investigated and proved beforehand to bring out the individual personal touch of comfort. When after exhaustive study and proven results a certain product meets your requirements, let no one convince you to substitute some other product."

Too many cooks spoil the broth, we are told. But what if they are all properly trained? Miss Ames, director of science and arts in the public schools, Gary, Ind., explains how in Gary two common complaints about foods teaching have been overcome—(1) its impracticability and (2) its burden upon taxpayers.

IN GARY, Ind., all teaching of foods is done through the medium of the school cafeteria and all foods classes must be self-supporting. The cafeteria must carry the expense of the teaching materials and upkeep as well as be self-sustaining.

The classes are assigned to the foods teachers—from twenty-four to thirty girls in each class. There are three classes assigned before the lunch periods. The period is sixty minutes in length, five days a week, and usually for a semester. The lunch served at the two noon periods is prepared by these classes and served in such a way that pupils are willing to pay for it. This fact in itself constitutes quite a test of classroom product.

The teacher of these classes must hold the state home economics license. Only teachers holding degrees in home economics are employed. The work is of such character that only a teacher of high caliber and with good business sense is successful. She should have a personality attractive to children, be able to teach, have good knowledge of dietetics, be a skillful buyer, a good manager of practical help and a good accountant. This seems a pretty large requirement, but there are teachers of this type.

There are two types of school to be considered, the large and the small.

They differ widely in method of conduct. The teacher in the small school must be a combination of teacher and big sister. She will probably have little practical help, perhaps only a woman to do cafeteria dishwashing.

In the three sixty-minute periods the three classes are with her, she must not only make the necessary preparation for the noon lunch but give the theoretical side of the work as well. She must organize her work so that a part of the hour, two or three times a week, may be given over to book work, discussion of the great number of topics which are involved in the actual preparation of

food, buying and budgeting. In the small schools the lunch lines are small and the practical side of the work is not overwhelming.

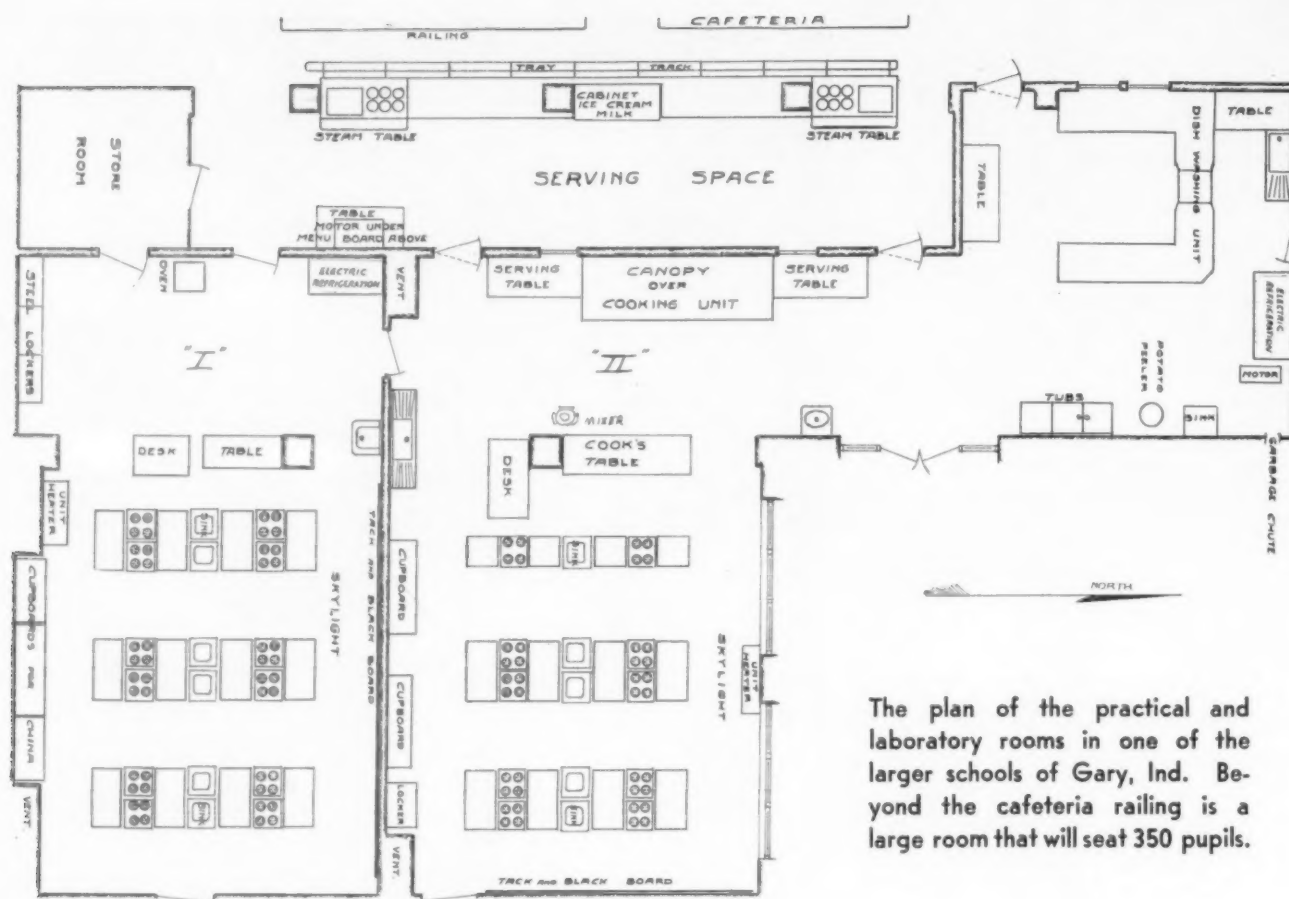
In the large school the situation is ideal for the Gary plan for home economics teaching. There are two teachers and two classrooms—one a typical classroom or laboratory for foods work, the other a combination of classroom and practical kitchen. There is also a large room with cafeteria counters and tables.

There is great possibility of variation in the arrangement of schedule in a school of this type. The plan is to have a full sized class assigned to



Cooks in the Making

By ELIZABETH AMES



The plan of the practical and laboratory rooms in one of the larger schools of Gary, Ind. Beyond the cafeteria railing is a large room that will seat 350 pupils.

each teacher. Designating the typical classroom or laboratory as Room 1, and the practical room as 2, the teacher and children (A Group) in Room 1 will do the traditional type of foods work for the week periods of time designated.

While this teacher and group are doing this traditional type of work, the second teacher with her group (B Group) is in Room 2 and is producing the cafeteria lunch material. At the end of the week these groups change: Group A goes from Room 1 to Room 2, and Group B, which has been in Room 2, goes to Room 1.

This provides an alternation for the children of a week of laboratory and theoretical work with a week of practical work. This alternation is constant for the period of time assigned for foods work, usually a semester.

Classes assigned to Group A, Room 1 during the week will have regularly assigned textbook work, discussion, notebook work, experiments conducted by the teacher, planning of

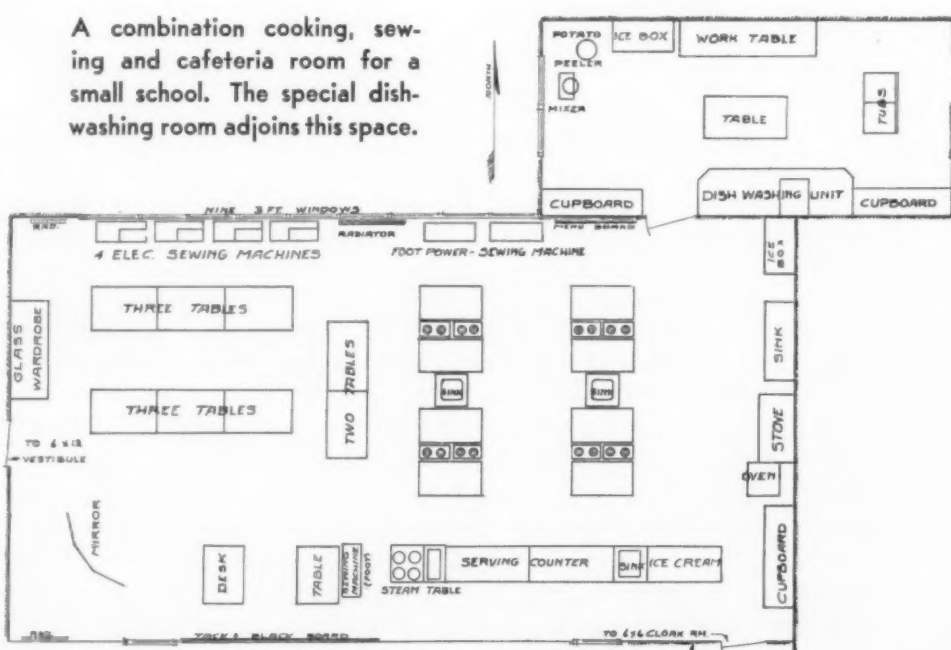
menus, budgeting and unit cooking. This week's work corresponds to the traditional foods classroom work. Interest has been found to be keener and skill much greater because of the work done in the practical laboratory.

While Group A in Room 1 is proceeding as outlined, Group B in

Room 2 is getting the practical experience involved in the preparation of the school lunch. One of the most essential points is to divide the girls into groups. The number of groups will correspond as nearly as possible with the types of work to be done.

There will be the preparation of

A combination cooking, sewing and cafeteria room for a small school. The special dish-washing room adjoins this space.



KNOX SCIENTIFIC FACTS

Knox Gelatine is prepared under scientific control throughout and takes six weeks to make.

Analysis
Knox Gelatine
Protein (14 amino acids) 85.0-86.0%
Calcium Phosphate 1.0-1.25%
Fat (less than) 0.1%
Moisture 13.0-14.0%
Carbohydrate Nil



Knox Gelatine exceeds in quality all U. S. P. standards ... no carbohydrates ... pH about 6.0 ... bacteriologically safe.

Seven to ten days are required to remove the calcium phosphate.



*Sunshine
on a Plate*

GELATINE is a *Natural* with SCHOOL CHILDREN Unlike a Cultivated Taste Such as Olives

Gelatine makes good with the child from infancy upward. Did you ever see a child who didn't naturally like gelatine? Nature sets the standard—Knox Sparkling Gelatine fills the need.

Knox Sparkling Gelatine answers every need of the cafeteria manager. It is an energy food which does not suffer from over heaviness—a piquant dessert that is not cloying.

Make sure it's Knox Sparkling Gelatine because only Knox can offer you a gelatine of such uniformly high standards. Knox Sparkling Gelatine may be had in institutional packages of larger size which proportionately reduce the cost.

You may also now obtain KNOX JELL—a ready-to-set jell with pure flavor added. A quality product in 26 oz. tins and 3¼ oz. packages and only takes 5 minutes to make.

KNOX SPARKLING GELATINE

KNOX GELATINE LABORATORIES, 467 Knox Ave., Johnstown, N. Y.

Please send me FREE your brochures on Food Economy and Diets using Knox Sparkling Gelatine.

Name.....

Address.....

City..... State.....

(1) soups, (2) meats, (3) vegetables, (4) salads, (5) breads (muffins, biscuits, etc.), (6) desserts, (7) the setting up of the counter, and (8) checking the dining room (tables, silver, salts and peppers).

Each of these groups must be carefully rotated so that each girl may have experience in each kind of work. Too much emphasis cannot be placed on this point and on the keeping of a record, in clear form, of this rotation for each individual. Group records are not enough. It must be an individual rotation record showing the length of time each girl has spent on each task.

The large school will have more practical help than the small school. There will be a practical cook, perhaps one or two assistant practical cooks, and one to three dishwashers.

Throughout the school foods rooms, four pupil desks, with white composition top, provided with four gas burners and with sinks, are used. Series ovens are provided in place of the portable oven. These are the double (one above the other) gas ovens. A good, large gas range with two gas ovens is also in each room. In the large school, the adjoining room is furnished with tables, chairs and a double service, well equipped lunch counter.

In the small school, pupil desks of the table type, also white topped but without gas burners, are so placed as to make working space for the preparation of salads and sandwiches during class periods and to form the cafeteria counter during the two lunch hours. In this unit is a steam table.

A good sized, well insulated ice box is provided, if possible a box with mechanical refrigeration. If a box with mechanical refrigeration cannot be had at the time of purchase, it is well to get a box that will take an iceless unit should it be possible to install one.

In the small schools the home economics teacher teaches foods in the morning and clothing in the afternoon. The same room is used for both so the sewing tables are used for the

cafeteria lunch in the noon periods and for sewing classes in the afternoon. The rooms are large enough so that one half is fully equipped for foods work and the other as fully equipped for noon lunch service and for afternoon clothing classes.

If possible a small adjoining room is used as a dishwashing room. This is desirable as otherwise the noise and confusion of the cafeteria "clean-up" will be distracting to the afternoon classes.

One of the questions that seems to suggest itself at this point is, "Isn't this type of work an exploitation of the children?" It might easily be were it not for the employment of enough practical help to safeguard the situation.

In any school as soon as the number served makes it necessary and in consequence the income from the lunch line permits, a practical cook, and if the school is large enough, one or two under cooks are employed. These women must be the type one would be willing to have in contact with children, must be immaculately neat, of good disposition and good workers.

When the tasks are assigned, the

children go to work, some working with the practical cooks, some by themselves, but all under the supervision of the teacher. With this practical help the girls are able first to observe, then do, the various types of work. Anything too advanced, anything too difficult (such as handling large quantities or roasts) can be cared for by these women.

Foods handled in the practical room are prepared in family sized quantities. This means that a girl makes a family size batch of muffins, a full sized cake, a family sized meat loaf. Sandwiches are made and wrapped for the lunch counter, salads are prepared in full portions, all foods are prepared in full sized recipes.

This procedure has been found valuable because it gives the girls practice in doing these things in such a way as to enable them to repeat the process at home without having to change the recipe or procedure. In the usual small quantity cooking there must be the increase of amount when the full sized recipe is used at home and there is lack of practice in manipulation which the girls are getting each day in the practical room.

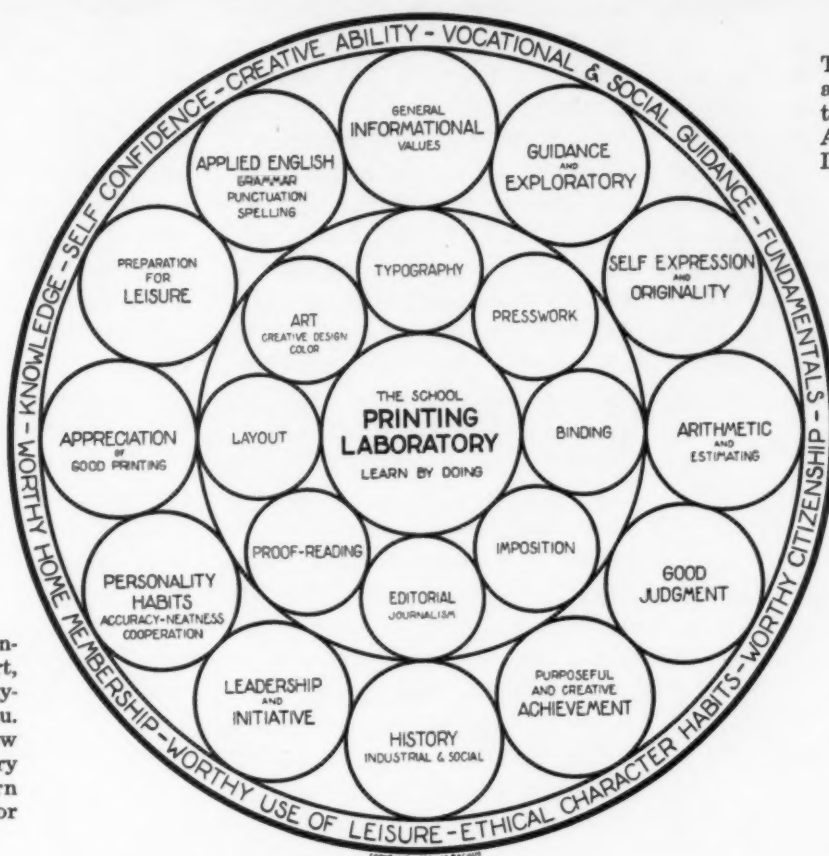
The girls, too, acquire a sense of



These girls are being initiated into the art of sandwich making. Once made, the individual sandwiches must be wrapped neatly to ensure sales appeal.

EDUCATION *and* PRINTING are INSEPARABLE

The accompanying social and educational objectives chart prepared by American Type Founders Department of Education



We have prepared an enlarged educational chart, as shown in accompanying illustration, for you. This chart illustrates how the Printing Laboratory fits into the modern school system. Send for your copy.

LEARN BY DOING This is the educational philosophy of today, and *Learning by Doing* develops initiative and creative thinking. Creative ability is essential to successful living. *Learn by Printing* is the application of the *Learn by Doing* philosophy.

WHY TEACH PRINTING?

1. A school printing department is as vital to the educational and social life of the school as the newspaper is to the community.
2. A course in printing correlates with, and motivates all, academic work. It is of equal value to boys and girls.
3. Printing is an activity unit especially strong in correct habit-forming values, and provides unusual opportunities for the development of creative abilities.
4. Printing is "The Mother of Progress."
5. It interprets school life and ideals to the school public, enabling you to sell more completely your educational program to your community. You can't afford to be without it.
6. The widely varied activities in the Printing Laboratory provide for many individual differences.
7. A School Printing Laboratory is an activity unit rich in cultural and educational values.
8. Printing is a course in Applied English, and Applied Art—a purposeful creative activity.

The Department of Education of American Type Founders employs the services of professional educators and efficiency engineers, to aid you in organizing printing courses in your school.

Ask for details

AMERICAN TYPE FOUNDERS DEPARTMENT OF EDUCATION
ELIZABETH, NEW JERSEY

Types used: Century Schoolbook Family and Century Bold Italic

responsibility often undeveloped by the small quantity method. It is a serious thing to spoil a full sized recipe but a small amount does not count for much when spoiled. Another point is that any failure leaves the lunch line "short." There is also a pride in seeing one's product on the counter and in knowing it is salable.

Prices of food are kept as low as possible. Insistence is made that only good quality be used. A typical menu follows, copied from the menu board of the Emerson School:

Cream of corn soup.....	5c
Roast beef and dressing.....	12
Mashed potatoes.....	5
Buttered spinach.....	5
Creamed cauliflower.....	5
Ham salad sandwich.....	5
Bread and butter sandwich....	2
Lettuce salad.....	6
Waldorf salad.....	10
Coleslaw.....	6
Marshmallow pudding.....	5
Pumpkin pie.....	6
Cherry cobbler.....	5
Fruit sauce.....	5
Baked apple.....	5
Cake.....	6
Cookies.....	1
Dutch apple cake.....	5
Milk.....	3
Tea, coffee (teachers only)....	5
Grapes, 5c. Oranges.....	3
Tangerines, bananas, apples....	3

There is an agreement in the schools that meats shall not exceed 12 cents, salads 10 cents, vegetables 5 cents, plain desserts 6 cents, and that milk shall be sold at cost. If meat prices do not drop, it may be necessary to increase the price slightly.

The smallest cafeteria serves about sixty at its peak and the largest 800. This plan of teaching can be carried out only when the lunch line is large enough to cover expenses. When it cannot do this, the foods work is discontinued and sewing classes take the place of the food classes.

The items of expense that must be covered are definite. The school board equips the room in the beginning: furniture, stoves, ice box, tables, chairs, utensils and dishes. This

being done, the board expects no further expense unless the major fixed equipment wears out. The board pays the teacher's salary. No rent is charged for the room, as it is an instructional unit.

The home economics department is responsible for earning money for all food costs in the cafeteria; all food costs of the classroom, that is, supplies used in the experimental and unit foods laboratory; all gas used in both rooms; all replacement of dishes and utensils; all salaries of help, practical cooks, helpers and dishwashers, and if possible uniforms.

When earnings permit, white uniforms are furnished for children. If the earnings will not permit the purchase of uniforms, children must bring aprons from home. Teachers and practical help wear white uniforms, but they buy them themselves.

There is no central buying. Each teacher, head teacher in the large school, does her own buying. The stores in the vicinity of the school are patronized whenever quality and price permit. Milk is supplied by one firm. This firm is the one having the best yearly average in butter fat and bacterial count. The milk reports on which this choice is based are obtained from the city laboratory.

The accounting for all the school cafeterias of the city is done through the school auditor. In each school the money earned is turned in each day to the clerk in the principal's office. A receipt is given the home economics teacher for the amount. At the end of the week all monies are sent, with the report, to the auditor.

Keeping the Books

All bills for supplies of all kinds are sent by the merchant to the teacher incurring the bill. She corrects them if any mistake has been made, O. K.'s them, and sends them to the auditor who pays them out of the money turned in to him from the school.

At the end of each month a statement comes from the auditor's office to the teacher with an itemized account of all payments made. The

funds accumulated, if any, belong to the home economics department.

Many interesting facts may be traced in these reports. The teacher may be checked on her buying ability, on the thrift with which the department is managed or on the amount of help required. Too much cannot be read into these figures as there are varying set-ups in each school and communities vary greatly in the number of luncheon patrons.

These lean years, and in a steel city such as Gary they have been very lean years, have been responsible for the closure of seven cafeterias. One will reopen next fall. There have been other losses also. As nearly as possible all earnings must return to the children in good and cheap food. Prior to 1929 there was on hand a fair cash balance, although every effort was made to keep this as small as possible.

Possibilities for Girls

There are many untouched possibilities in this work. An unusual chance presents itself to the girl who wishes to study and practice business management. Some of the schools use a separate room and have a separate lunch line for the small children. Here is opportunity to study and demonstrate child feeding at low cost and to experiment in ways of serving food to small children in attractive form. Fine training in discriminate buying could be another development.

When Saturday School is in session children, bringing with them the raw materials for the things they want to make, come voluntarily to the school. If they want to, they may get their material at school and pay the cost of materials used to the home economics teacher. Even meat loaves are made ready for either the Saturday evening or Sunday dinner.

Experience in the teaching of foods both in the traditional type and the Gary type of work has proved that the latter does more to produce a dependable, resourceful and efficient training for our girls, a training that will carry over into the home life.

Water, Water Everywhere, But Not a Drop . . . !

● INDICTMENT

Over eighty Portable Chair manufacturers, but not a one that offers true comfort together with other important features.

● CONFESSION

It was ROYAL that originated the steel folding chair some thirty years ago . . . and perhaps today sell as many as anyone . . . but ROYAL frankly admits that while their chairs are less uncomfortable than most chairs . . . neither theirs nor any other afford the seating satisfaction of a non-folding chair.

● MIRED

There have been many things wrong with all portable chairs . . . efforts to correct existing shortcomings have not progressed very far . . . shortcomings that everyone knew about . . . faults that most manufacturers had long despaired of overcoming.

● IN A HUDDLE

For two years ROYAL has had this in mind . . . and in their experimental department. They have been busy analyzing chairs . . . studying what the "sitter" needs . . . trying to do things that "couldn't be done."

● EUREKA !!!

At last ROYAL has developed a chair that is an evolution . . . and maybe a revolution. They are just about ready to announce these chairs . . . which are of such a new and different principle that those of old design (Royal chairs included) will soon be in the horse and buggy class.

● NO NAME

ROYAL has everything but the name for this accomplishment . . . perhaps within the next month they, or somebody else (you included) may think of one that is suitable. To assist in your naming our child, a sample chair for your inspection will be sent on request. IN ANY EVENT, SEE THE ROYAL ANNOUNCEMENT NEXT MONTH.

★
ROYAL METAL
MFG. CO.

1133 S. Michigan Ave.,
CHICAGO

Also New York and Los
Angeles

★

Royal

"THE FINEST SINCE '97"

Write for catalog of

MODERN SCHOOL SEATING
for
MODERN AMERICAN SCHOOLS

NEWS IN REVIEW

Federal Funds for School Construction and Repair Total \$603,462,489 in Last Two Years

By ALICE BARROWS

From September, 1933, to December 1, 1935, the Public Works Administration allotted to the states \$311,466,089 in grants and loans for 3,059 educational buildings. The total estimated cost of these buildings is \$475,462,489.

"Educational Buildings" include elementary and secondary school buildings, college buildings, other educational institutions and public libraries. Of the total allotment of \$311,466,089, 84 per cent, or \$264,219,154, was allotted in grants and loans for 2,803 elementary and secondary public school buildings. Colleges received \$43,357,260 for 206 building projects; 32 public libraries received \$1,589,146, and 18 other educational institutions received \$2,300,529 (Table I).

These allotments were made by the PWA under appropriations received both through the National Industrial Recovery Act and Deficiency Appropriation Act of 1934 and the Emergency Relief Act passed in April, 1935. Under the NIRA, grants of 30 per cent and loans of 70 per cent of the cost of labor and materials were made available for the construction of school buildings. Under the Emergency Relief Act of

1935, grants of 45 per cent and loans of 55 per cent of the cost of labor and materials were made available.

An examination of the number of projects and the total allotments under the NIRA and ERA is interesting as showing both how the stimulus to construction was increased by the increased grant and in showing what every school superintendent and architect knows, that it takes considerable time to get a construction program under way. For example, under the NIRA, the PWA allotted from September, 1933, to Dec. 1, 1935, \$116,835,517 in grants and loans for 981 educational buildings. Under the Emergency Relief Act, the PWA allotted in the six months from April to October, 1935, nearly twice as much, i.e., \$194,630,572 for 2,078 educational buildings. Of this amount, \$170,727,985 was for elementary and secondary public school buildings.

The time that it takes to get a public works program under way and the increasing speed with which it operates after the first year are shown by the fact that during the first ten months from September, 1933, to July, 1934, the expenditures per month under the

NIRA were \$764,312, whereas from July through September, 1935, the expenditures per month were \$7,688,786, or ten times as much as during the first year.

It takes approximately two years for the planning and erection of a school building. Consequently, it cannot be expected that the allotments of the last six months will be actually expended for another eighteen months. This would mean a monthly expenditure of about \$10,000,000 and, judging by the rate of increase in expenditure during the past few months, it is probable that the monthly expenditure would be greater than \$10,000,000.

The average yearly expenditure for school building construction from 1922 to 1928, inclusive, was \$385,000,000. This sum represents, of course, an expenditure based on two years for the planning and erection of school buildings. If the rate of allotments by the PWA for public school buildings for the six months from April to October, 1935, i.e., \$170,727,985, could be maintained, the total allotment per year would be \$341,455,970, or nearly the average for school construction from 1922 to 1928.

In addition to the allotments by the PWA for construction of new buildings and additions, \$50,000,000 was expended by the CWA for the repair and rehabilitation of public school buildings, and the WPA has approved, as of October 15, an allotment of \$78,000,000 for the same purposes. This sum of \$128,000,000, added to the \$311,466,089 allotted by the PWA since September, 1933, makes a total of \$439,466,089, which has been made available by the federal

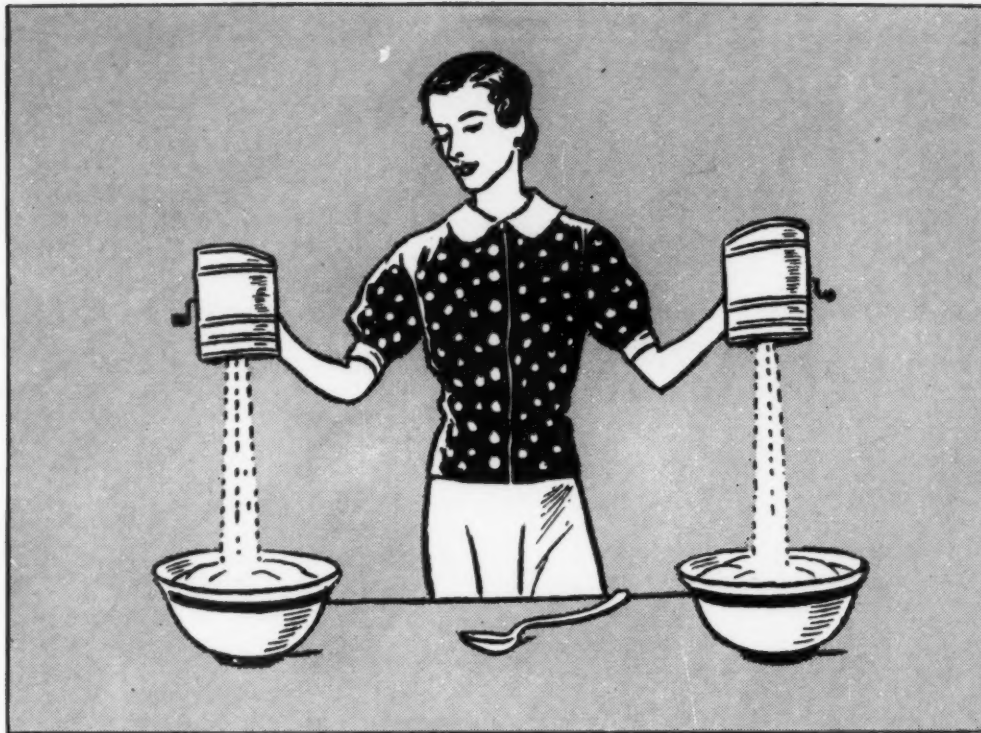
(Continued on page 64)

TABLE I—SUMMARY OF ALLOTMENTS FOR EDUCATIONAL BUILDINGS UNDER NIRA AND ERA PROGRAMS, 1935 AS OF DECEMBER 1, 1935*

<i>I—Allotments Made Under NIRA Act and Deficiency Appropriation Act of 1934</i>					
Type	No. of Projects	Loan	Grant	Allotment	Total Cost
Educational buildings (Total).....	981	\$65,728,906	\$51,106,611	\$116,835,517	\$187,569,746
Secondary schools.....	846	50,544,641	42,946,528	93,491,169	156,302,522
Colleges and universities.....	115	14,921,965	7,345,883	22,267,848	28,192,436
Other educational institutions.....	4	161,000	225,400	386,400	771,433
Libraries.....	16	101,300	588,800	690,100	2,303,355
<i>II—Allotments Made Under Emergency Relief Act of 1935</i>					
Educational buildings (Total).....	2,078	\$67,874,372	\$126,756,200	\$194,630,572	\$287,892,743
Secondary schools.....	1,957	57,875,352	112,852,633	170,727,985	255,657,213
Colleges and universities.....	91	9,525,600	11,563,812	21,089,412	27,027,031
Other educational institutions.....	14	299,000	1,615,129	1,914,129	3,590,111
Libraries.....	16	174,420	724,626	899,046	1,618,388
<i>III—Total Allotments Made Under NIRA, 1934, and ERA, 1935.</i>					
Educational buildings (Total).....	3,059	\$133,603,278	\$177,862,811	\$311,466,089	\$475,462,489
Secondary schools.....	2,803	108,419,993	155,799,161	264,219,154	411,959,735
Colleges and universities.....	206	24,447,565	18,909,695	43,357,260	55,219,467
Other educational institutions.....	18	460,000	1,840,529	2,300,529	4,361,544
Libraries.....	32	275,720	1,313,426	1,589,146	3,921,743

*From Division of Economics and Statistics, Public Works Administration.

Most Flours Look Alike



ANY housewife will tell you that one brand of flour looks pretty much like any other. But she'll also tell you that the results she gets are vastly different.

There's Just As Much Difference in Cleaners

Dishwashing compounds may look a great deal alike but there's a great deal of difference in the results they give. The worthwhile results given by Wyandotte Cherokee Cleaner are

Cleaner dishes

Lower dishwashing costs

Protection to dishwashing machines.

If you are not now enjoying the efficiency and economy of Wyandotte Cherokee Cleaner it will pay you well to ask your Wyandotte Service Representative to give you a demonstration, at your convenience and without placing you under any obligation.



WYANDOTTE CHEROKEE CLEANER

The J. B. Ford Company, Wyandotte, Michigan

TABLE II—EXPENDITURES ON EDUCATIONAL INSTITUTIONS ALLOTTED UNDER NIRA PROGRAM, 1933-35*

	Thru June 30, 1934 (10 mo.)	July 1934 Thru June 1935 (12 mo.)	July 1935 Thru Sept. 1935 (3 mo.)	Total to Sept. 30, 1935 (24 mo.)
Educational institutions				
Total.....	\$7,643,128	\$60,432,751	\$23,066,359	\$91,142,238
Secondary schools.....	6,166,102	49,084,825	19,663,821	74,914,748
Colleges and institutions...	1,310,838	9,928,061	2,928,207	14,167,106
Other educational institu- tions.....		338,866	162,250	501,116
Libraries.....	166,188	1,080,999	312,081	1,559,268
Expenditures per month...	764,312	5,036,063	7,688,786	3,797,593

*Division of Economics and Statistics, Public Works Administration.

(Continued from page 62)

government for the new construction, repair and rehabilitation of school buildings during the last two years.

The estimated cost for the school building projects for which allotments were made by the PWA is \$475,462,489. This sum, added to the \$128,000,000 which the CWA and WPA allotted for the repair and rehabilitation of school buildings, gives a total of \$603,462,489, as the estimated cost of new construction, repairs and rehabilitation of school buildings made possible by the allotment of federal funds during the last two years. This does not include an estimated \$14,500,000 that the states expended for materials for CWA projects.

From 1930 to 1934, expenditures for school building construction decreased

78 per cent. In 1930 the total expenditures for capital outlay were \$270,877,969, or \$114,000,000 less than the yearly average. In 1932 the expenditures were \$210,996,262; and for the school year ending June 30, 1934, the total dropped to \$59,276,555.

It is obvious that, if the rate of allotments of the last six months by the PWA should be continued, it would not make up for the lag in construction from 1930 to 1934 and the inevitable delays in getting a large construction program under way, but it would go far toward relieving the most critical situations in the school building field.

At the present time no more funds are available under the PWA for the construction of school buildings or other public works projects.

Food Forum Aids School Work in Hartford, Conn.

Junior and senior high school pupils in Hartford who patronize their school lunchrooms have, as in other communities, limited funds with which to purchase their noon meal. According to the director of one large cafeteria, many Hartford children have only five cents a day to spend for lunch, and the average expenditure per pupil is now five cents per day as compared with nine cents in 1931. To help school lunch managers in meeting this situation during times of steadily rising costs a two-day forum was announced some months ago, and invitations to participate sent to food specialists in New England, New Jersey, New York and Pennsylvania.

The forum program was divided into two parts. The first centered about pupil activities at the Alfred E. Burr Junior High School. The high school social studies department had an exhibition depicting the changes and developments in American foods from the time of the Indians, the Dutch and the early colonists in New England down to mod-

ern days. The guidance classes, art department, home-making department, and the science and English classes all contributed to the project.

The second day's program was made up of talks on foods by Alice Bradley, Dr. Mary deGarmo Bryan, Constance Hart, Henrietta Radell, Wells Sherman and J. O. Dahl.

62 Counties Get \$20,000,000

The largest PWA school building program in any state is now under way in Pennsylvania, according to Dr. Lester K. Ade, superintendent of public instruction. Two hundred and twenty-five school building PWA projects, totaling an approximate expenditure of \$20,000,000, in sixty-two counties have been approved by President Roosevelt, and construction work was started on December 15. Projects have been approved in all counties but Forrest, Fulton, Montour, Pike and Union. Philadelphia leads the state with projects estimated at \$11,810,000, while Allegheny county has twenty-three, estimated at \$2,854,000.

Vote \$12,392,600 for Los Angeles Schools

Los Angeles voted \$12,392,600 for school building bonds by a majority of almost three to one in a special election held in November. This assures the city an intensive school building program of \$22,532,000 next year, for the PWA will make grants aggregating \$10,139,400.

Most of the money made available will be used for elementary schools, where conditions are unusually crowded and where thousands of children attend classes in tents and unsafe wooden structures.

Elementary schools will have \$11,416,000 spent in their division; high schools, \$10,469,000, and junior colleges, \$647,000. The building program includes about 200 structures of various kinds.

\$750,000 to Women's Colleges

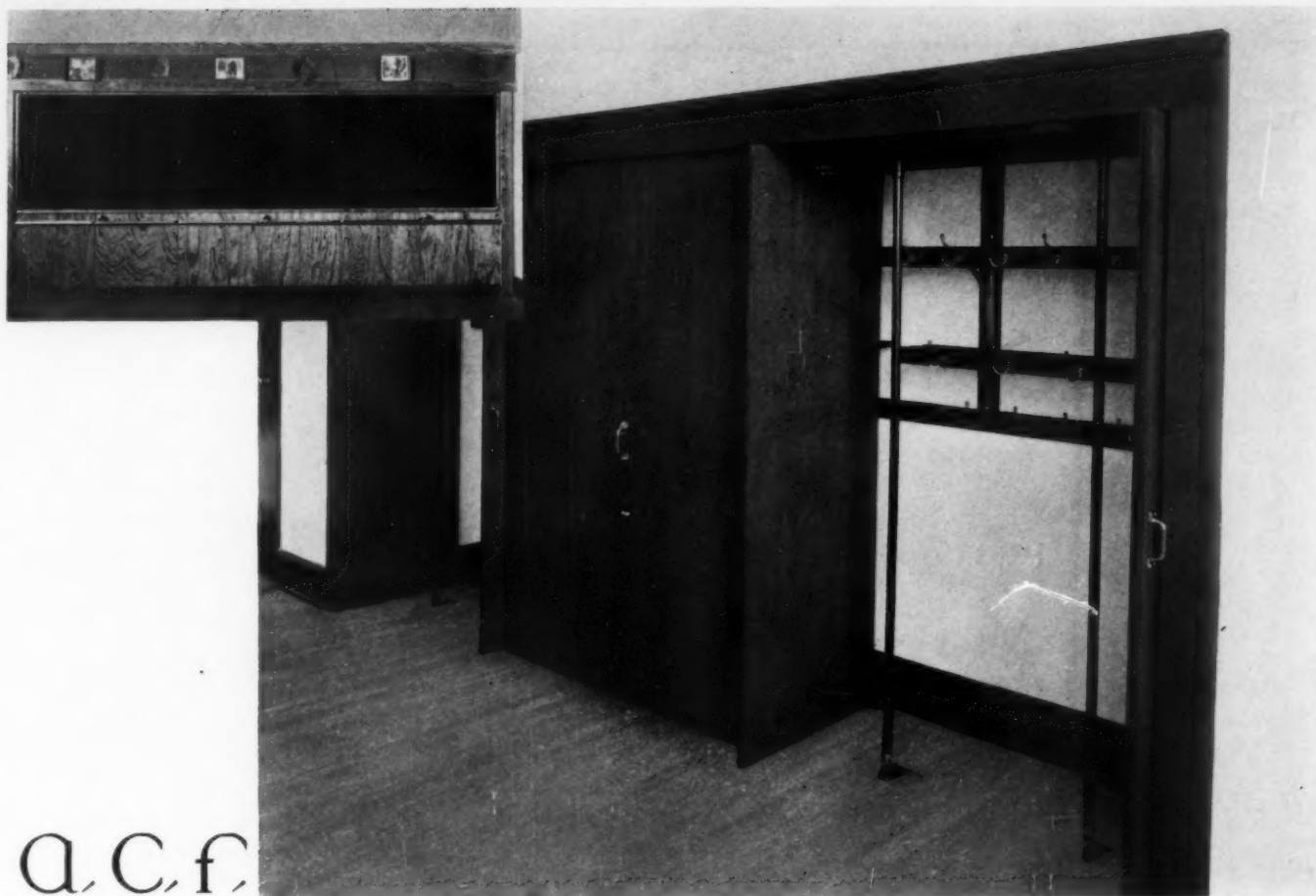
Five women's colleges were voted grants totaling \$575,000 by the Carnegie Corporation of New York "in recognition of the high quality of the work" of the institutions. Bryn Mawr College, Bryn Mawr, Pa., will receive \$150,000 for endowment; Smith College, Northampton, Mass., \$175,000 for library development; Vassar College, Poughkeepsie, N. Y., \$160,000 for library endowment; Scripps College, Claremont, Calif., \$40,000 for development of its educational program, and Sweet Briar College, Sweet Briar, Va., \$50,000 for endowment.

Predict 1937 Decline in Enrollment

High school enrollments will reach their peak in 1937 and then decline, according to Rufus D. Smith, New York University, who has just completed a study of population trends and their effect on education. The falling birth rate, which declined sharply after the close of the World War, is the principal cause of the expected lowered enrollment. Already in some cities, there are not enough children to occupy the desks in the lower grades although the upper grades are crowded.

Announce Textbook Contest

A prize of \$4,000 is being offered for the best basal textbook or textbook series in the field of social studies for the senior high school by the Atlantic Monthly Press and Little, Brown & Co.

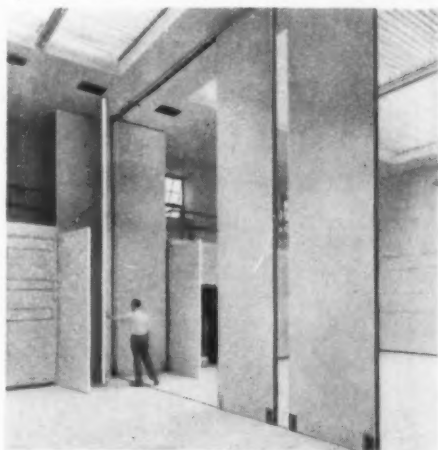


A.C.F.

FAIRHURST SCHOOL WARDROBES

...AND *folding* WALLS

Gymnasium, Yale University. Architect, John Russell Pope.



Also A.C.F. Fairhurst folding walls. Lock rigidly into place. May be furnished with blackboards and continuous chalk rail.

Fairhurst Wardrobes care for more pupils than do other wardrobes of equal dimensions. All parts subject to stress are amply rugged. In the open position the doors are entirely out of the way at the ends of each compartment. The doors pivot, there are no rollers or wheels, no track or slots on the floor. The operation is simple, smooth, and quiet. The interior arrangement remains unchanged, and aisles and interiors are free from obstructions whether the doors are opened or closed. Sagging of floors does not affect operation of doors in any way. All wardrobes furnished complete in wood or metal, including hooks and hangers.

AMERICAN CAR AND FOUNDRY COMPANY

30 CHURCH STREET, NEW YORK, N. Y. • TELEPHONE CORTLANDT 7-8100

Please send me data on A.C.F. Fairhurst School Wardrobes and folding walls.

Name _____

Address _____

PRIVATE SCHOOLS

California's Progressive Schools Produce Films

Motion picture films, made by children in progressive schools in California with child actors and scenery which the children had made themselves, were shown at a recent regional conference of the Progressive Education Association in New York City.

"A Visit to a Modern Nursery School," a kindergarten presentation of "Our Colonial Home," a first grade film of "Activity, Guidance and Growth," and a fourth grade production based on the railroad engine for which the pupils built a wooden engine and props, were among the films shown.

Pupils of the ninth grade of the Roosevelt High School, Los Angeles, presented a film of David Copperfield which they had produced after viewing the commercial version and conducting research work regarding the period.

Abbot Academy Principal Dies

Miss Bertha Bailey, principal of the Abbot Academy, Andover, Mass., for the last twenty-three years, died recently at Goeymans, N. Y., two weeks after the start of her sabbatical leave, which she had planned to spend in Florida and on the Mediterranean. Before her association with Abbot Academy, Miss Bailey taught at the Hill School, Shelbyville, Ky.; Miss Middleberger's, Cleveland; Miss Brown's, New York; Miss Stuart's, Pittsburgh, and Taconic School, Lakeville, Conn.

Purchases Estate for School

An estate, located on the Boulder Creek Highway between Ben Lomond and Brookdale, Calif., known as "Riverwood," has been purchased by Theodore Hammond Smith, Pasadena, who plans to use it for a private school.

Academy Pupil Best Translator

Philip Renier, a pupil at Columbia Academy, Dubuque, Iowa, is the national champion in high school translation contests held in connection with the observance of the two-thousandth anniversary of Horace. Columbia Academy is a boys' high school. Second place winner in the high school division was Norris

Smith of Little Rock, Ark. Enola Brandt of Milwaukee State Teachers College won the college section title. Contestants in both divisions translated the sixteenth ode in Book Two. Announcement of the contest winners is made by Prof. Roy C. Flickinger of the University of Iowa, general chairman of the Horace anniversary celebration.

Riverdale School Gets Gift

The first "unsolicited" contribution received by the Riverdale Country School, Riverdale, N. Y., since the depression is announced by that institution. It consists of \$5,000 given anonymously. The sum will be used for scholarships.

Hart Fessenden Succeeds Father

Hart Fessenden, the assistant head master, has been elected by the board of trustees of Fessenden School, West Newton, Mass., to succeed his father, Frederick J. Fessenden, as head master. The elder Mr. Fessenden, who founded the school thirty-two years ago, was made head master emeritus and president of the board. The school is especially for younger boys; it prepares them for secondary schools.

Education by and for the Camera

The Rockwood Park School, Jamaica Plain, Mass., a country day and boarding school for boys and girls up to the ninth grade, emphasizes visual education. Each classroom is equipped with teaching aids equipment, and a library of such aids is maintained by the school. Laboratories and apparatus are provided where teachers and pupils may prepare their own motion pictures, slides, film slides and pictures.

Taft Announces Retirement

Horace Dutton Taft, founder and head master of Taft School, Watertown, Conn., has announced his retirement from the school during the coming year. Brother of the late William Howard Taft, Mr. Taft founded the school in 1890, eleven years after his graduation from Yale, and housed it in an old Watertown hotel. In 1927 he turned it over to a board of trustees who raised \$2,000,000 for new buildings.

Barnard School Head Honored

More than 600 alumni and friends of the Barnard School for Boys, New York City, paid honor recently to Dr. William L. Hazen, founder and head master of that institution. Doctor Hazen has completed fifty years of service in the school.

Hobby Show at Friends School

Successful in bringing together children, parents and teachers was the Hobby Show staged for three days by the Germantown Friends School, Germantown, Pa. This is an annual event and marks the fifth of the series. It bears the title "Temporary Museum of Intellectual Curiosities."

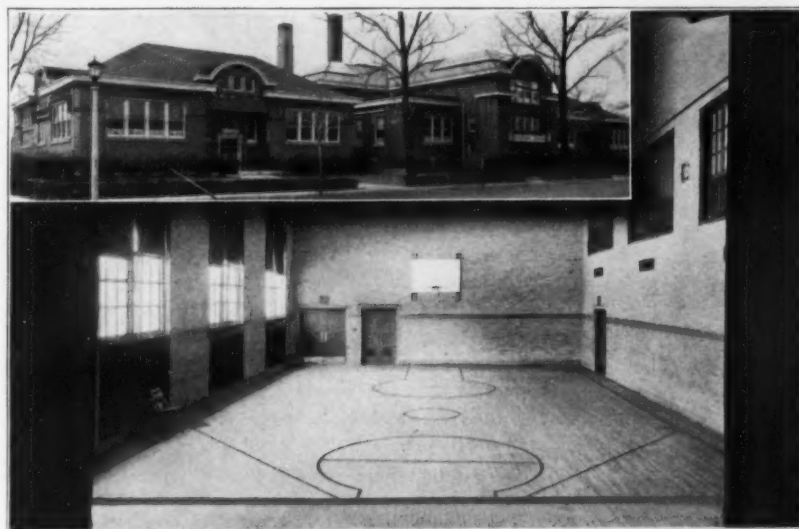
Governor Dummer Makes Changes

The addition of a screened terrace on the south side of Mansion House, the enlargement of the study hall, and the moving of the platform from the front to the east side are among the changes and improvements recently made at Governor Dummer Academy.

Coming Meetings

- Jan. 2-4—Florida Education Association, Orlando.
- Jan. 16-17—Association of American Colleges, New York City.
- Jan. 28-29—Nebraska Association of School Boards and Executives, Kearney.
- Feb. 6-8—Oklahoma Education Association, Oklahoma City.
- Feb. 18-22—National Association of Deans of Women, St. Louis.
- Feb. 19-22—National Vocational Guidance Association, St. Louis.
- Feb. 20-22—International Council for Exceptional Children, Chicago.
- Feb. 21-22—American Association of Teachers' Colleges, St. Louis.
- Feb. 22-27—Department of Superintendence, N. E. A., St. Louis.
- March 12-14—South Carolina Education Association, Columbia.
- March 19-21—North Carolina Education Association, Delegate Assembly, Raleigh.
- March 26-28—Alabama Education Association.
- March 29-May 2—Music Educators National Conference, New York City.
- April 11—California Teachers Association, San Francisco.
- April 15-18—Kentucky Education Association, Louisville.
- April 16-18—Georgia Education Association, Macon.
- April 18—Annual meeting of delegates, Massachusetts Teachers Federation.
- June 28-July 2—National Education Association, Portland, Ore.

Lincoln School
Oak Park,
Ill.



E. E. Roberts and
Elmer C. Roberts, Inc.
Architects,
Chicago

CHOSE HARD MAPLE *for Gymnasium because it comes closest to meeting all the requirements*

Few problems in school construction require deeper consideration than that of selecting the material for floors. How will the flooring affect school room routine—the health and efficiency of pupils? Will it be an economy over a period of years? How easily can it be kept clean? Will it provide firm anchorage for desks? Will it simplify or hinder other construction work? These are some of the questions that must be asked—and answered.

Fortunately, one flooring material gives the proper answer to all these questions, *Northern Hard Maple*—the flooring material that combines warm, dry, cushioning effect beneath the feet, with lasting wear and smoothness.

Northern Hard Maple is resilient, tough-fibred, tight-grained. It will not splinter or develop ridges when subjected to the scuffing and pounding of youthful feet. It actually outwears stone! Maple, moreover, is excep-

"We are glad to say that the Maple Flooring used in the Lincoln School gymnasium in Oak Park, Illinois, was selected because we felt it was the best flooring material to use. We feel that it comes closer to meeting all the requirements than any other flooring.

"We used Maple Flooring in the classrooms of the old buildings in the Lincoln School group twenty-five years ago and they are still in good condition. The Superintendent of Buildings seals these in a manner which now gives a fine surface, very readily cleaned."

ELMER C. ROBERTS

tionally easy to keep clean. Its smooth surface offers no lodging spaces for dirt and dust.

Consider these advantages of *Northern Hard Maple*. Consider, too, the fact that it provides firm anchorage for desks and does not interfere with other construction work. Get all the facts about this unique flooring material. Consult your architect.

GOOD SERVICE FINISHES ARE AVAILABLE

—especially adapted to classroom floors of Maple. These finishes seal the surface of hard maple, keep out dirt, resist soil stains and prove non-slippery. They will not mar, scratch or flake off. That's why they are easy to clean and maintain at low cost.

Floor *with* Maple

The letters **MFMA** on Maple, Beech or Birch Flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade-mark is for your protection. Look for it on the flooring you use. **MFMA**

Whether you floor with blocks or strips—with or without pattern—over screeds, wood or concrete sub-floors—Maple will provide a floor that endures and satisfies.



Members of the Maple Flooring Manufacturers Association have contributed many thousands of dollars and years of work to standardize and improve the manufacture and grade uniformity of Northern Maple, Beech and Birch Flooring. The following manufacturers only are licensed to use the Association Trade-mark **MFMA**. Specify **MFMA** on the flooring you use.

Beck, August C. Company Milwaukee, Wis.
Brown Dimension Company Manistique, Mich.
Bruce, E. L. Company Memphis, Tenn.
(Mill at Reed City, Mich.)
Cobbs & Mitchell, Inc. Cadillac, Mich.
Connor Lumber & Land Company Laona, Wis.
(Sales Office, Marshfield, Wis.)
Cummer-Diggins Company Cadillac, Mich.
Farrin Lumber Co., M. B. Cincinnati, Ohio
Holt Hardwood Company Oconto, Wis.
Kerry & Hanson Flooring Co. Grayling, Mich.
Kneeland-Bigelow Company Bay City, Mich.
North Branch Flooring Co. Chicago, Ill.
Northwestern Cooperaage & Lumber Co.
Gladstone, Mich.
Oval Wood Dish Corp. Tupper Lake, N. Y.
Robbins Flooring Company Rhinelander, Wis.
Sawyer Goodman Company Marinette, Wis.
Stephenson Company, I. Wells, Mich.
West Virginia Pulp & Paper Co. Cass, W. Va.
Wells, J. W. Lumber Co. Menominee, Mich.
Wisconsin Land & Lbr. Co. Hermansville, Mich.
Yawkey-Bissell Lumber Co. White Lake, Wis.
See our advertisement Sec., 15/53 in Sweet's. Write for folder: How Architects and School Officials Regard School Room Floors of Hard Maple.

**MAPLE FLOORING
MANUFACTURERS ASSOCIATION**
1783 McCormick Building
Chicago, Illinois

REGIONAL NEWS

Eastern States

NEW JERSEY

Kearny.—The board of education has applied to the PWA for permission to earmark \$20,000 of its allotment for the new Roosevelt School for the purchase of property to be used for a school playground.

Rumson.—The high school building, constructed through the PWA, will be completed and ready for occupancy this month. A two-story brick structure, colonial in design, it has a tower on the front center rising 100 feet, in which is a chime clock. A telephone and radio system that connect with every room and a model kitchen of six units are among the school's features.

MARYLAND

Baltimore.—A lake will probably be the site of the new Eastern High School, if a resolution adopted by representatives of improvement associations in the northern and eastern parts of the city gets official approval. The lake is located in Clinton Park and formerly served as a reservoir but is no longer used by the bureau of water supply. The resolution advocated draining the lake, a 15-acre area and pointed out that the bowl-like lake bottom would make cellar excavations unnecessary.

NEW YORK

Albany.—Preschool vision testing and eye injuries are featured in a new series of posters being distributed by the New York State Bureau of Prevention of Blindness. . . . The New York State Teachers Association formally opened its new headquarters at 152 Washington Avenue recently. The opening marked the culmination of ninety years' work in the interests of public education in New York State by the association.

Sherman.—The passage of a state law for compulsory instruction in physical education has made the construction of a gymnasium necessary here. The board of education was notified recently that it would receive a grant of \$69,000 for an addition to the present school building. The only special courses now available are agriculture, homemaking, commerce, music and classical, but under the new plan which will make this a central school, physical education, wood working, auto mechanics, and a home-making department will be added to the curriculum.

Tottenville.—Twenty-six years of campaigning came to a close for South Shore residents, whose children have been

traveling fifteen miles to attend high school, when the cornerstone of the \$1,000,000 Tottenville High School was laid in November at ceremonies attended by more than 1,000 persons.

Middle Western States

INDIANA

Evansville.—The course in fourth grade arithmetic is emphasizing the reading of problems with interest and clearly defined meaning, in order to promote understanding and free use of the arithmetical language. This includes silent and oral reading of the advance lesson, with emphasis on good pronunciation, phrasing and expression, clear imagery and grasp of the essential thought or question.

Indianapolis.—Some 73,591 persons visited the public schools here during American Education Week.

IOWA

Clinton.—Sophomores in the Clinton High School are receiving instruction in the operation of automobiles three times a week during their home room period as a part of the street and highway safety program instituted by C. W. Brown, superintendent.

Buchanan County.—A county-wide diagnostic test is being given in reading. When the tests have been scored, an item analysis of the results will be prepared for use as a basis for an intensive remedial program.

KANSAS

Mulberry.—Nearly 600 pupils went out on a strike when the city council rejected a plan to sell an abandoned school and use the proceeds to pay teachers' salaries, which are several months in arrears.

MINNESOTA

Clay County.—Members of the Clay County Bar Association, in their war against crime, have introduced a program on crime and its evils in the schools. The lawyers are also lecturing to the parent-teacher groups in the county.

NEBRASKA

Omaha.—The school budget, which went into effect on Sept. 1, 1935, shows an increase of \$308,305 as compared to the 1934-1935 budget. The increase does not provide for salary increments, but the board granted a \$30 bonus to 1,400 members of the teaching, clerical and janitorial staffs. The tax rate remains at thirteen mills where it has been for the last ten years. . . . "Stories of the

Far West" is a collection of short stories based on pioneer days in the Middle and Far West written by Joseph G. Masters, principal, Omaha Central High School. Mr. Masters gathered the material during vacations.

Southern States

MISSISSIPPI

Tupelo.—Few teachers in the northeast part of the state are able to attend the spring conventions in Jackson, so the Mississippi Education Association three years ago held its first northeast convention for the benefit of this district in the fall of the year, and found it successful. This year the convention was held on November 15 and 16.

Bay St. Louis.—Two thousand rural pupils in Hancock County found the doors of their schools locked when their teachers struck over delinquent pay checks. Thirty-five bus drivers and transportation men are also in the strike.

NORTH CAROLINA

Raleigh.—Faced with the fact that no funds were available for sick-leave purposes unless such funds were taken out of the salaries which had already been set aside for the teachers, the state school commission decided that it would be advisable to leave the salaries fixed as they are, a 20 per cent increase over last year's, and forego the sick leave for the present year.

WEST VIRGINIA

Charleston.—The West Virginia Association of Elementary Principals published its first yearbook this year and presented copies to each principal enrolled in the organization. Among the features of the book is a complete list and directory of all the elementary principals in the state.

Western States

CALIFORNIA

Imperial County.—Westside Union, Seeley and Lantana have decided to form a union school district and have asked Silsbee and Elm to join them. The plans call for a new building of concrete and steel which will accommodate the pupils of the five schools. The addition of one bus only will be needed to transport the pupils.

Oakland.—The safety education program of the public school system is showing definite results, according to the four-page leaflet published in connection with the drive. Persons between the ages of fifteen and twenty who were victims of automobile accidents have decreased in number steadily since 1931 when there were 290 such victims to 161 for 1934.

IRWIN

Presents Another Very Important Advance in Movable Desk Construction



The "Plus and Minus" Frame

The construction of this frame provides two very desirable advantages:

(1) It enables the chair to be brought closer to the desk, or extended to fit the individual's requirements, and thus induces the correct, healthful posture.

(2) It also functions as a self levelling device, so that when the desk is placed on an uneven floor, it automatically adjusts itself to the unevenness, and thus eliminates all rocking or vibration which is commonly

experienced with this type of desk when made with a one-piece construction.

One of a great many important improvements pioneered by the IRWIN Company, the "Plus and Minus Frame" is indicative of the up-to-the-minute, scientific styling and sound value incorporated in all items of the very complete IRWIN line of school seating. Write for a copy of our new catalog. In it you will find the ideal equipment for every classroom or auditorium requirement, priced for true economy.

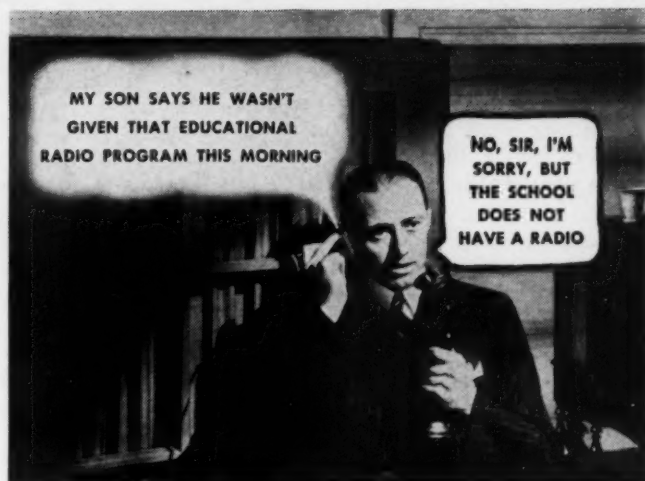


No. 5750
Auditorium
Chair—One of a great
many models with either
plywood or upholstered
backs and seats. In the complete line
you will find exactly the chair best
suited to your auditorium requirements.

IRWIN SEATING COMPANY

GRAND RAPIDS, MICHIGAN

Seating Specialists for over a Quarter of a Century
NEW YORK OFFICE, 381 FOURTH AVENUE
Territorial Distributors Throughout U. S. A.



Radio is essential in modern education

PARENTS are hearing the modern educational programs now being broadcast, and are wondering why their children do not hear them—or are rejoicing with their children over these extraordinary free facilities offered by radio to the modern school.

Do the parents of your pupils ask for radio—or applaud your progressiveness?

If you do not now have radio facilities, ask RCA for information. RCA has been a pioneer and leader in radio educational work, and through its subsidiary, the National Broadcasting Co., provides many educational features. RCA equipment embodies the priceless experience of America's leader in radio, and in sound recording and reproduction. School systems include not only radio, but also record reproduction, and announcements through individual loud speakers in each room. Send the coupon below.



RCA VICTOR SCHOOL SOUND SYSTEMS

RCA Manufacturing Co., Inc., Camden, N. J., a subsidiary of the
RADIO CORPORATION OF AMERICA

Commercial Sound Section, Dept. NS.,
RCA Manufacturing Co., Inc., Camden, N. J.

Gentlemen: Please send me complete information about RCA educational equipment.

NAME _____ STREET _____

CITY _____ STATE _____

COLORADO

Alamosa.—Under a new vocational education program, pupils in the high school may enroll for vocational education, determine the line of work in which they are interested, and then be placed for half days as apprentices or understudies under the direction of business and industrial leaders, spending only their mornings in formal school work.

Boulder.—A committee of two board members, the superintendent of schools, and four teachers and principals have been appointed by the board of education and the president of the Boulder Community Education Association, to study teacher salary schedules and make recommendations for establishing a scientific salary schedule with adequate annual increments, based upon extensive investigations of the best practices available. . . . Contracts have been let for foundation and excavation work on the new city high school, which is to be built at a cost of half a million dollars. Frank W. Frewen, Denver, is the architect. The contract for the superstructure will be let probably in early February. This is a WPA project, the government contributing \$217,000 toward the cost of the new building.

OREGON

Clackamas County.—A statewide campaign to familiarize Oregon pupils with the part played by Dr. John McLoughlin in the settlement of the state is being conducted by educators and civic clubs of the county. All school children will be given the story of Doctor McLoughlin in a pamphlet written by Dean Alfred Powers and printed on paper made of Oregon wood.

TEXAS

Franklin.—The schoolhouse here was destroyed by flames which started when the roof caught fire during a morning session. The children carried books and other equipment out of the building, and no one was injured. Until the school can be rebuilt, classes are meeting in the home demonstration clubhouse.

San Antonio.—In order to settle the disputes that have arisen on the south side over the new high school, it is now proposed to build it flanking the junior high school, with the use of the auditorium and cafeteria shared by both schools, with a swimming pool and gymnasium built for the use of the high school. Two large playgrounds, a stadium and a baseball field complete the unit.

UTAH

Logan.—Flood lights have been placed on the senior high school campus for the illumination of grounds and buildings.

Jersey Teachers Consider Better Education Methods

What is right with American public education and how it can be improved was the general theme selected for discussion at the recent convention of the New Jersey State Teachers' Association.

The gathering was the largest ever held in the eighty-one years the association has been in existence. At the annual banquet Gov. Harold G. Hoffman awarded the Medal for Distinguished Service to the cause of education in the state to Judge Joseph G. Wolber, who for nine years was state senator representing Essex County. Judge Wolber was the sponsor of the bill to provide equalization of educational opportunity in the state, which was passed unanimously by the 1935 legislature.

There was a great array of speakers which included Dr. Will Durant, Dr. Albert Edward Wiggam, President A. J. Stoddard of the Department of Superintendence of the N. E. A., Mrs. Nellie Ross, director of the United States Mint, President Robert C. Clothier of Rutgers University, Dr. Jesse H. Newlon, director of the Lincoln School of Teachers College, John A. Spargo of Nutley, N. J., and State Commissioner Charles H. Elliott.

Dr. Leon N. Neulen of Camden was elected president after a spirited contest, and Nattie Doremus of Paterson was named first vice president. Frank G. Pickell, superintendent of the Montclair Public Schools, who has been president for three years, automatically became a member of the executive committee as past president.

Crucial problems considered at the convention had to do with the maintenance of the state teachers' pension fund on an actuarially sound basis. There was also a spirited discussion in regard to recently enacted rules governing the certification of teachers.

Finds Changing Philosophy at Vocational Convention

The annual convention of the American Vocational Association was held in Chicago on December 4 to 7. More than 4,000 of the 14,000 members registered and more than 2,000 of these attended the banquet.

One of the thoughts emphasized in most of the meetings had to do with the need for a closer relationship between the various groups concerned with industrial education. Up to the present there has been a tendency on the part of many to assume that industrial arts and industrial education are separate,

and that they bear no relation to each other. Now the feeling is developing that they are interdependent and that those interested in them must work together for the common good.

This was not the only evidence of a changing philosophy as Dr. E. A. Lee of California urged most strongly that a closer bond be built up between the A. V. A. and the Department of Superintendence. He believed that if this were done a better mutual understanding would be developed.

Henry Ohl, president of the Wisconsin State Federation of Labor, in speaking for organized labor, expressed the hope that a cooperative relationship might be established between the A. V. A. and the organizations which he represented to the end that greater opportunities for vocational training might be provided for both minors and adults.

As a result of this general discussion of cooperation a curriculum readjustment committee was appointed to work with the N. E. A. on matters of common interest.

John Woodman Higgins, president of the Pressed Steel Company, Worcester, Mass., emphasized the importance of vocational training for modern industry. He pointed out that there is a serious shortage of skilled workers, particularly in the metal trades. There are those who are inclined to discredit this statement on the ground that modern machinery has taken the place of the skilled worker. However, Mr. Higgins maintained that the development of the machine is due to the coordinated skill of trained men and therefore skilled men must be trained for industry.

The method to be used in training these skilled workers was the topic discussed in several section meetings. The development of apprenticeship and the relationship of the schools to the apprenticeship program seemed to be dominant in the discussion. At present there is a national apprentice committee under the federal plan for stimulating business. This committee has been active in promoting apprenticeships throughout the country and should be credited with overcoming many difficulties.

Unfortunately those who are responsible for Smith-Hughes classes in the various states have been hampered to some extent by a lack of agreement in the body responsible for promoting the work. W. F. Patterson, secretary for the national committee on apprenticeship, stated clearly where his committee stood on some of the points in question, and indicated that it would cooperate with the Smith-Hughes group in any honest effort to develop an adequate apprenticeship program.

AMIGLAZE

TRADE MARK

Phenocel Process • Plastic Bakelite

BRUSHLESS

ALL PURPOSE | ALL SURFACE

REFINISHER

WIPE WITH CLOTH

AMIGLAZE

What it does

Instantly renews woodwork, marble, floors, furniture, linoleum, walls, wainscot and metal trim.

Preserves Brass, Bronze and all polished metals. No constant re-polishing.

Dries Quickly • Dries Hard
Spreads 2,000 sq. ft. per gal.

AMIGLAZE

Resists

Alcohol • Harsh Soaps

Hot Water • Moisture

Acids • Weather

Oxidation of Metals

AMIGLAZE

Eliminates

Varnishing • Repainting

Constant Repolishing

Costly Labor

Amiglaze is A Guaranteed Product

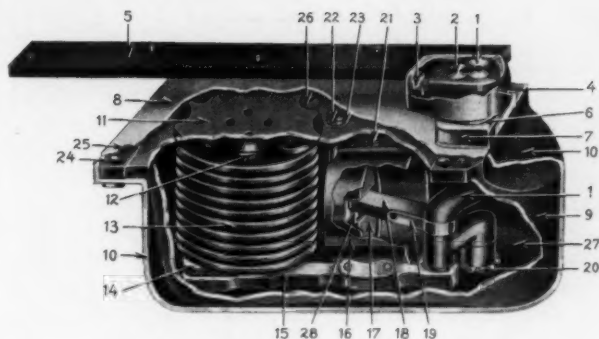
TRY A GALLON—SEE FOR YOURSELF

TRIAL GALLON \$3.50

5-GALLON CONTAINER \$16.50

AMIGLAZE

MADE TO TAKE THE PUNISHMENT



That School Doors Always Get

We know no place where building hardware gets harder abuse than the Check on a school door. Students hit it with the same fury that a star full back hits the line.

For that difficult spot, we recommend you install Rixson Nos. 20 & 25 Single Acting Floor Check.

The case hardened steel spindle construction on 1/4 inch ball bearings, swings heavy exterior doors freely, yet closing under positive control. The top pivot is a bronze casting within which a hardened steel pin operates on a ball bearing. This prevents wear and holds doors always true.

Their efficiency and durability have caused Rixson 20's and 25's to be generally specified in educational buildings. Write us, or ask your school architect for details.

See Sweet's for further reference

THE OSCAR C. RIXSON COMPANY

4450 Carroll Ave., Chicago, Ill.

New York Office: 2034 Webster Ave., N. Y. C.

Philadelphia — Atlanta — New Orleans — Los Angeles — San Francisco

RIXSON

HARDWARE SPECIALTIES

Survey of Educational Films Is in Progress

The U. S. Office of Education and the American Council on Education are jointly conducting a survey to list all motion pictures that have an educational value. This includes not only the strict classroom film, but subjects useful to medical students, scientific workers, vocational classes, CCC camps, teachers and other specialized educational groups.

The survey is being made under a grant from the General Education Board (Rockefeller) and is part of the work being carried on by the American Council on Education in connection with its sponsorship of the proposed American Educational Film Institute.

More than 10,000 film catalogue cards have been mailed to 1,800 sources of films in this country. This card covers nearly 100 items, which will result in accurate information being filed in one central office covering information necessary to judge the adaptability of the film to specific educational needs. Supplemental analyses and listings will be prepared and publicized in an appropriate manner.

The American Council on Education will furnish a supply of the film catalogue cards to any person or organization that has produced, now owns or has the exclusive distribution rights to any motion picture that should be included in this list who has not received them.

Ohio Schoolmen Defend Program of Visual Aid

A roar of protest greeted the suggestion of the Sherrill Committee that visual instruction be abolished in the state of Ohio. Taking the form of theses and letters on the value of visual education and its wide and increasing usage in the school field, some of these protests were reprinted in *Ohio Schools*.

Writes M. C. Nauts, principal of the Devilbiss High School, Toledo: "Such a recommendation indicates to me that the members of this committee know nothing of the possibilities of motion pictures in a modern school. . . . Our school has seven machines. . . . We make extensive use of our motion pictures and all kinds of illustrated material for the instruction of pupils in large groups in the field of science, fine arts, history, industrial arts and character education."

"That provision (the Zoul-Carey Act) costs the taxpayers of Ohio nothing," explains F. H. Bair, superintendent of schools at Shaker Heights. "It fills a long-felt want and anticipates an im-

provement in the methods and technique of education so important that I cannot conceive of anyone standing in the way."

George N. Thurston, superintendent of schools at Kilbourne, writes, "There are those who would deny our children the right to see even the pictures of the great modern tanyards, blacksmith shops and knitting needles in action—the right to see even the great events of their country's history reenacted on the screen before them, for fear the little devils might be pleased, entertained, even. . . . From the priests of the generation of book knowledge worshippers, wandering in the wilderness of Latin and algebra in a solitary way . . . deliver us, and send our sons into the Canaan of visual education. . . ."

Will Distribute Foreign Films

Organized for the purpose of distributing 35-mm. and 16-mm. foreign talking pictures to educational institutions in the United States, the International Film Bureau, Chicago, has as members of its advisory board, Prof. Otto F. Bond, chairman of the department of romance languages in the college of the University of Chicago, William Kurath, assistant professor of German, the University of Chicago, and Clifton M. Utley. The board, together with a committee representing college and high school language teachers and the Alli-

ance Francaise, will preview all films to be offered by the bureau. Wesley Greene, manager of foreign film showings at International House, University of Chicago, is director of the new foreign film bureau.

\$100,000 Grant to Museum

A grant of \$100,000 has been made to the Museum of Modern Art, New York City, by the Rockefeller Foundation to finance the assembling and preservation of outstanding and historically important motion pictures from 1889 to the present day.

Release Series on Natural Life

A series of educational pictures, bearing the general series title, "The Struggle to Live," are being released by RKO to theaters throughout the country. Each picture of the series is one reel, and is based on natural life studies.

Projector Disciplines Pupils

Lunch-time discipline problems have been solved at Lorain High School, Lorain, Ohio. The school has installed a sound projector and now shows two reels each day as features, with occasional short comedies. More than half the school's enrollment attends each day. The pupil's drop a penny each in a box provided for that purpose.

Films for the School Screen

Life and Literature Series—V. Germany

Along the Romantic Rhine—Views of the Black Forest, Heidelberg, Mainz, Koblenz and Cologne. 1 reel. 16 mm., silent. Transportation charges only. German Railroads Information Office, 665 Fifth Avenue, New York, N. Y.

A Brief Journey Through Northern Germany—Northern cities and countryside. 1 reel. 16 mm., silent. Motion Picture Bureau, National Council of the Y. M. C. A., 347 Madison Avenue, New York City, or 19 South La-Salle Street, Chicago.

Picturesque Salzburg—Where Mozart was born; castles of old prince bishops; picturesque types of people; Salzach River. ¼ reel. 16 mm., silent. For rent or purchase. Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago.

Where Spring Is Earliest in Germany, Vintagers' Festival, Frankfurt-am-Main—Three films of 1 reel each. 16 mm., silent. Transportation charges only. German Railroads Information

Office, 665 Fifth Avenue, New York, N. Y.

Oberammergau—Where the Passion Play is given. 2 reels. 16 mm., silent. Transportation charges only. German Railroads Information Office, 665 Fifth Avenue, New York, N. Y.

Cologne—Unique sights of this city. 1 reel. 16 mm., silent. For rent or purchase. Bell and Howell Company, 1810 Larchmont Avenue, Chicago.

Der Schimmelreiter—From Theodore Storm's book. Without English titles. 86 minutes' running time. 35 mm., sound. For rent. General Foreign Sales Corporation, 729 Seventh Avenue, New York City, or International Film Bureau, 203 South Dearborn Street, Chicago.

Emil und Die Detektive—No English subtitles but pantomime excellent. Should probably be used with the support of school German departments. 35 mm., sound. For rent. International Film Bureau, 203 South Dearborn Street, Chicago.

Stage ● Equipment

Velour Curtains * Draperies *
Scenery and Rigging * Equip-
ment of the Highest Quality
* Service and Installation by
Experienced Personnel * Write

TWIN CITY SCENIC COMPANY

1126 CHIMES BUILDING, SYRACUSE, N. Y.
2819 NICOLLET AVENUE, MINNEAPOLIS, MINN.
602 MARQUETTE BLDG., DETROIT, MICHIGAN
4704 PERSHING AVENUE, FT. WORTH, TEXAS

● Make THREE TESTS— See Why A-S-E Lockers Put a New High on Value



Three tests prove A-S-E Lockers the wise buy:
1. *Features.* A-S-E Lockers have sagproof, built-in hinges with no bolts or rivets—sure, secure latch and lock—overlapping body construction for strength—dust and verminproof, riveted latch bar, big, strong snagproof handle—and more.

2. *Tests.* Try to spring the door on an A-S-E Locker! Try to bend the louvers! They take tests that ruin ordinary construction and materials.

3. *Use.* Ask users of A-S-E Lockers. They tell of long, low-cost service, rugged strength and good looks. And use is the final test of all.

The A-S-E Locker line meets every school need. Send for catalog C-29. Single Tier A-S-E Lockers, group of two.

Send today for catalog C-29—filled with locker information.

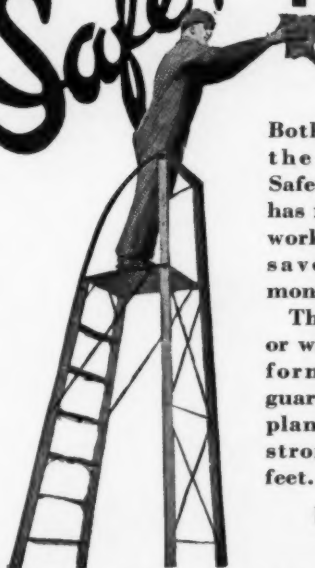
ALL-STEEL-EQUIP CO.
605 JOHN ST. INCORPORATED AURORA, ILL.

**THE IDEAL FOLDING CHAIR
IN THE AUDITORIUM, THE DETACH-
ABLE ARM IN RESERVE—FURNISH
INSTANT ECONOMICAL ACCOMMO-
DATIONS IN AN EMERGENCY**



CLARIN MFG. CO.
4640 WEST HARRISON ST., CHICAGO, ILL.

**Safe! FASTER
WORK**



Both hands are used by the man on a Dayton Safety Ladder, because he has no fear of falling. He works faster and better, saves your time and money.

The Dayton does not tip or wobble, has wide platform with protecting guard rail. Made of airplane spruce—light but strong—in sizes 3 to 16 feet. Moderately priced.

Write Dept. NS-1
for details

THE DAYTON SAFETY LADDER CO.
121-123 West Third St., CINCINNATI, O.

**DAYTON
Safety Ladder**
(PATENTED)

Stock carried on Pacific Coast by E. D. Bullard Co., Los Angeles and San Francisco, and by 190 other distributors from coast to coast. Made and distributed in Canada by Safety Supply Co., Toronto.

Radio Class Prepares

All-Women Broadcast

One of the few regular all-women broadcasts in the world is the Basement Studio program from Station KFRU, Columbia, Mo. The girls of Stephens College, more than 100 of them, participate in the programs.

Stephens College has been on the air for more than a year, except during vacation periods. Supporting the program are two first-year sections and one second-year section in radio. Regular college credit is given for this class, but the programs are extracurricular.

The Basement Studio program is on the air on Wednesday evenings at 9 o'clock, Central Standard Time. Although the station is on only 500 watts during the evening hours, the college has received mail concerning the program from twenty-three states and one Canadian province.

From beginning to end, the scripts are written and spoken by the college students. The one exception is when professional plays are given; even these are student adaptations.

Speech predominates in the weekly Basement Studio programs, and plays, short talks, brief skits and occasional musical numbers make up the half-hour broadcast. The music department has programs of its own.

Office of Education Puts

Movie Bookmarks on Air

Motion Picture Bookmarks, a service provided by the Cleveland Public Library to Cleveland citizens for the last twelve years, will now be made available to citizens throughout the country by the Office of Education on its Monday radio program of Education in the News.

These bookmarks are short lists of books which promise interesting reading in connection with current films hits based on famous novels, biographies or historical episodes. The Cleveland Public Library selects from coming Hollywood releases the pictures most likely to create a demand on the library. Then experts select books interesting to those who are going to see the picture or who have seen the picture. In connection with "Alice Adams," the motion picture bookmark listed not only Tarkington's book, "Alice Adams," but four other books in which were to be found other famous Tarkington heroines. Also the bookmark listed four other books on manners which would have helped Alice in her social problems and might even help modern Alices faced with like problems.

On the Air During January

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Standard except when otherwise specified.

Daily

National Farm and Home Hour¹—12:30-1:30 p.m. (NBC-WJZ).

Monday

American Education Forum—2:00-2:30 p.m. (NBC-WEAF).

History Series—2:30-3:00 p.m. (CBS).

Jan. 6—New Orleans.

Jan. 13—San Antonio.

Jan. 20—Pittsburgh.

Jan. 27—St. Louis.

Education in the News, including Motion Picture Bookmarks, Office of Education—7:30-7:45 p.m. (NBC-WEAF).

Tuesday

Your Child, Dr. Ella Oppenheimer, Children's Bureau, U. S. Department of Labor—11:15-11:30 a.m. (NBC-WEAF).

Treasure Trails in Art Series—2:30-3:00 p.m. (CBS).

Jan. 14—Woven Pictures and Their Stories.

Jan. 28—Adventures of a Master Sculptor—Michelangelo.

Literature Series—2:30-3:00 p.m. (CBS).

Jan. 7—A Poet of the Middle Ages—Dante.

Jan. 21—The Deeds of Sir Geraint (intermediate).

Science Service Series—4:30-4:45 p.m. (CBS).

Understanding Opera—6:35-7:00 (CBS).

Medical Emergencies and How They Are Met, dramatized program with incidental music, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).

Jan. 7—Winter Ills, Dr. Morris Fishbein, editor, *Journal of the American Medical Association and Hygeia*.

Jan. 14—Diphtheria, Dr. W. W. Bauer, American Medical Association.

Jan. 21—Scarlet Fever, Doctor Fishbein.

Jan. 28—Health of the Traveler, Doctor Bauer.

You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).

Jan. 7—Better Housing Through Better Zoning, Robert D. Kohn, former director of housing, PWA.

Jan. 14—Public Recreation, Robert Moses, commissioner of parks, New York City.

Jan. 21—Possibilities in Tax Title Lands, Frank Moore, counsel, Association of Towns of the State of New York.

Jan. 28—From Acres to Lots, Gordon Whitnall, member, California State Planning Board.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).

Jan. 8—Shaping Character, Howard M. LeSourd, professor of religious education, Boston University.

Jan. 15—Living Safely in a Dangerous World, Albert W. Whitney, vice president, National Safety Council.

Jan. 22—Know Your Government, Louis Brownlow, lecturer in political science, University of Chicago.

Jan. 29—Citizenship—Its Opportunities and Limitations, Walter Millard, field secretary, National Municipal League.

Geography Series—2:30-3:00 p.m. (CBS).

Jan. 8—Latvia, the Central Baltic State.

Jan. 15—The Dnieper Dam and Kiev.

Jan. 22—Turkistan in Its New Dress.

Jan. 29—Peiping and the Yellow River.

Youth Today, auspices of the National Student Federation—4:00-4:15 (CBS).

Our American Schools, directed by Belmont Farley—7:30-7:45 p.m. (NBC-WEAF).

The Cavalcade of America, dramatization of significant moments in American History—8:00-8:30 p.m. (CBS-WABC).

Thursday

Music Appreciation Series, Standard School Broadcasts,² 11:00-12:20 a.m. (elementary); 11:25-11:45 a.m. (NBC).

Music and Elementary Science Series—2:30-3:00 p.m. (CBS).

Jan. 9—The Baltics (intermediate), and Plants That Become Animals.

Jan. 16—The Leprechaun (primary), and How New Kinds of Plants and Animals Came.

Jan. 23—The Ukraine—Russia (intermediate), and The Sea Life of Long Ago.

Jan. 30—Let's Play (primary), and Fish That Could Live Out of Water.

Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).

Jan. 2—Henry VI—Part III.

Jan. 9—Richard III.

Jan. 16—Henry VIII.

Hendrik Willem Van Loon—8:45-9:00 p.m. (NBC-WJZ).

"To Arms for Peace," World Peaceways Series—9:30-10:00 p.m. (CBS-WABC).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C—11:00-12 m. Series B and D—11:30 a.m.-12:20 p.m. (NBC-WEAF, WJZ).

Vocational Guidance and Current Events Series—2:30-3:00 p.m. (CBS).

Jan. 10—Occupations Related to Building.

Jan. 17—Careers in Government Service.

Jan. 24—Getting Acquainted with Yourself.

Jan. 31—A Trained Vocational Counselor Can Help You.

General Federation of Women's Clubs Series—2:45-3:00 p.m. (NBC-WJZ).

Saturday

Our American Schools, directed by Florence Hale—11:00-11:15 a.m. (NBC-WEAF).

Your English—3:00-3:15 (NBC-WJZ).

Boston Symphony Orchestra—8:15-9:10 p.m. (NBC-WJZ).

Sunday

University of Chicago Round Table Discussions—12:30-1:00 p.m. (NBC-WEAF).

Philharmonic Society of New York, Otto Klemperer, conductor—3:00-5:00 p.m. (CBS).

Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).

General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

¹Except Sunday.

²Pacific Coast stations only.

It Keeps "Gym" Floors Like New



It is not easy to clean smooth floors. To clean them frequently and well and renew their brilliance, without wearing the surface, is a task that can be accomplished only with a powerful vacuum at the end of suitably designed vacuum tools.

Spencer Central and Portable Vacuum Cleaning Systems are effective for all types of cleaning found in schools. A few quick strokes of special tools and waxed floors take on a lustre like new. Other vacuum tools make fast work easy on cement and wood floors, chalk trays, erasers and furniture.

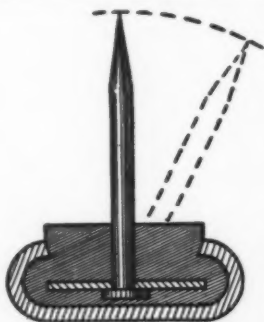
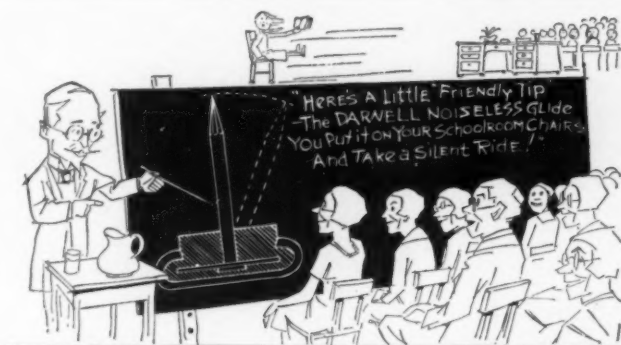
One man or woman can move and operate the Spencer Portable and do more and better work than by hand methods. Spencer Cleaners are built to last and have been endorsed by leading educators and architects.

A demonstration of the Spencer Portable can be arranged at your convenience.

SPENCER CENTRAL AND PORTABLE
HARTFORD VACUUM CLEANING SYSTEMS

S-21

THE SPENCER TURBINE CO., HARTFORD, CONN.



Dotted lines indicate degree to which chair may be tilted while glide remains flat on the floor. The rubber cushion absorbs all noise, and washer prevents nail from pulling out.

The "Science of Acoustics" is an important study, but how to obtain quietness in a classroom is of more importance to the teacher. The best aid to this end is through the use of

DARNELL Noiseless GLIDES

There is more efficient study, less floor wear and less wracking of furniture in those schools where all chairs and other light furniture have been equipped with Darnell Noiseless Glides.

Write for FREE Sample Set

DARNELL CORPORATION, LTD.

Station B, Box 4027-N, Long Beach, Calif.; 36 N. Clinton St., Dept. G, Chicago, Ill.

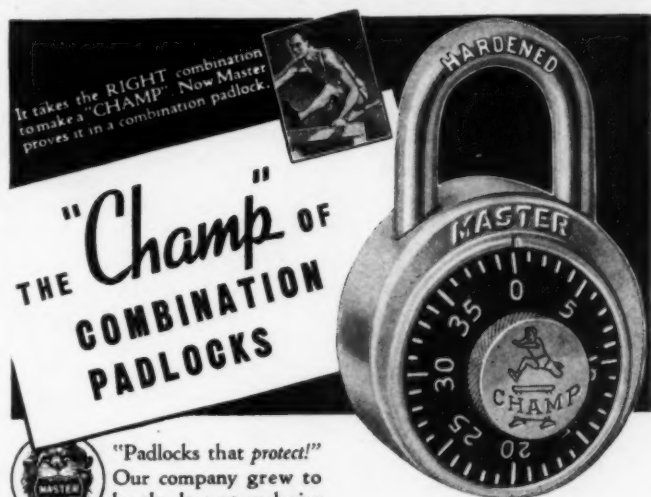
★ HOLTZER-CABOT CLOCKS ★ CHOSEN FOR NEWTON



The Newton Trade School is well known throughout the country and is rated as one of the leading schools in its field. The officials of this school, after careful consideration, decided to replace the existing clocks with a Holtzer-Cabot Clock System. This installation will provide all parts of the building with accurate time, hourly supervised by a Holtzer-Cabot Master Clock of the latest type.

Holtzer-Cabot has available time and program clocks to meet the need of every school whether large or small. These systems are engineered to suit the requirements of each installation and are economical to own and operate. Holtzer-Cabot Clock Systems have the approval of school boards and the endorsement of educators.

THE HOLTZER-CABOT ELECTRIC CO.
125 AMORY STREET BOSTON, MASS.



"Padlocks that protect!"
Our company grew to be the largest exclusive padlock manufacturer in the world through an unswerving policy of high quality.

"CHAMP" continues that policy in a combination padlock.

We ask you to see "CHAMP". School executives in charge of padlock purchasing may have a FREE SAMPLE for the asking. It is

MASTER No. 1 "Secret Service" One of a complete line of MASTER PADLOCKS (key-type) ranging from 10c to \$2.

Master Lock Co.

Milwaukee, Wis., U. S. A.

World's Largest Exclusive Padlock Manufacturers

NAMES IN THE NEWS . . .

Eastern States

RAYMOND B. FOSDICK, New York attorney, will become president of the Rockefeller Foundation and of the General Education Board on July 1.

CHARLES S. SWOPE, acting president since November 21, has been named president of the West Chester State Teachers College, Pennsylvania. Dr. Norman W. Cameron, former president, is protesting his dismissal, the newspapers report.

DR. KENYON L. BUTTERFIELD, for many years president of the Massachusetts State College, died at his home in Amherst, Mass., at the age of 67. Following his affiliation with Massachusetts State College, Doctor Butterfield was president of Michigan State College.

HOWARD SPALDING, formerly principal in the Canal Zone and assistant to PROF. THOMAS H. BRIGGS at Teachers College, Columbia University, during the summer, has been appointed principal of the high school at Plainfield, N. J.

WILLIAM O'FLAHERTY, assistant superintendent of public schools in New York City, died at the age of 67 after a long illness. Mr. O'Flaherty was appointed to the post of assistant superintendent in 1916, but has been identified with the city's school system since 1892.

The VERY REV. MICHAEL J. O'CONNELL has been installed as head of De Paul University, Chicago. The Rev. Mr. O'Connell, who has the distinction of being the university's youngest president, formerly taught at Webster College, Webster Groves, Mo.

DR. ABNER P. WAY has been made principal of Public School 103 in the Bronx, New York City. For many years Doctor Way has been assistant director of health education in charge of high schools and junior high schools. Coincident with Doctor Way's appointment, EDWARD GOLDWATER was made principal of P. S. 107, Queens.

DR. PAYSON SMITH, after almost twenty years as state commissioner of education in Massachusetts, has been superseded by JAMES G. REARDON. Mr. Reardon has been superintendent of schools in Adams, Mass.

WARD C. BOWEN has been appointed director of the visual instruction division of the New York state education department. He has been acting director since Dr. Abrams' retirement.

SISTER CONSTANCE, supervisor of the parochial schools of the Sisters of Mercy in the Altoona, Pa., diocese, died at the age of sixty-six.

M. CAREY THOMAS, president emeritus of Bryn Mawr College and one of the world's foremost educators, died recently at her home in Philadelphia. Miss Thomas became president of the institution in 1894, serving in that post until 1922 when she retired. In 1923 she was made president emeritus and also a life trustee of the college.

Middle Western States

DR. PAUL L. CRESSMAN, assistant superintendent of public instruction for Michigan, has resigned in order to return to the Pennsylvania state department of public instruction as director of vocational education.

AMELIA EARHART recently began her work as consultant in careers for women at Purdue University, where she is also assisting in the development of an aeronautical program.

DR. ARNOLD HILDEN, professor of psychology at the University of Iowa, has been appointed to succeed Dr. E. A. RUNDQUIST in the child study department of Minneapolis schools.

W. J. ROBINSON, superintendent of schools at Lincoln, Kan., has been appointed superintendent at Alden. Succeeding him at Lincoln is GEORGE LANNING, for five years head of the schools at Hill City. C. B. WILEY, superintendent of schools at Lucas, has been put in charge of the Hill City schools, and C. E. THUMA, formerly at Dorrance, has taken his place at Lucas. JOE MAHONEY, principal at Hunter, Kan., has been made superintendent at Dorrance.

CHESTER F. MILLER, superintendent of Saginaw schools, and Dr. DAVID D. HENRY, Wayne University, Detroit, have been elected to the Michigan Council on Education.

Newly elected district presidents in Nebraska are EARLE W. WILTSE, superintendent of schools at York; MRS. ALICE PETERSON, principal of the Dundee School, Omaha; H. D. McEACHEN, superintendent of schools at Neligh; W. C. BLOOM, superintendent of schools at Dawson County; JOHN D. RICE, superintendent of schools at Arapahoe, and O. J. WEYMOUTH, principal at Sidney.

A. J. FOY CROSS, who has been teacher, supervisor and superintendent of schools in Nebraska, has been appointed director of instruction of Omaha schools. CARRIE NEIDERMEYER, formerly a teacher in the Clifton Hill School, was appointed supervisor for kindergarten and first grade, and ELIZABETH RAINEY of the Harrison School was appointed supervisor of second and third grades, Omaha.

E. D. ROBERTS, superintendent of schools at Cincinnati, Ohio, has been appointed to membership on the state board of school examiners, where he will succeed S. A. FRAMPTON, superintendent at Bellefontaine.

Western States

CLAUDE L. REEVES, principal, Bell High School, Bell, Calif., was appointed principal of the Alhambra High School, Alhambra, Calif., and a member of the Los Angeles County school board. He succeeds the late DONALD ROBEY.

DR. HAROLD G. BLUE, a member of the faculty of the Colorado State College of Education, Greeley, has been appointed state director of the National Youth Administration to succeed RICHARD R. BROWN, recently made assistant national administrator.

JOE C. SCOTT, former superintendent of schools at Tishomingo, Okla., has been appointed assistant state superintendent of public instruction.

MARVIN G. ORR, professor of education at Southeastern Teachers College, Durant, Okla., resigned to become a high school inspector.

CLYDE BEARD, principal, Roseburg High School, Roseburg, Ore., was elected president of the High School Principals' Conference; THOMAS FOWLER, Tigard, was named vice president, and DEAN LOBAUGH, high school principal, Pendleton, member of the executive committee.

E. H. McCARTER, Jr., superintendent of schools at Hermleigh, Tex., resigned on November 1.

Southern States

DR. A. B. DINWIDDIE, president of Tulane University since 1918, died November 21 of heart disease after a long illness. He was sixty-four years old.

New principals in Harrison County, W. Va., high schools are HOMER H. MAY, Bristol; NORMAN R. TOLLY, Lost Creek, and CHARLES L. RICHTER, Lumbarport.

CORNELIA S. ADAIR, principal, Franklin School, Richmond, Va., has been appointed supervisor of federal aid to elementary and high school pupils.



MEDART *Steel Wardrobes* for *Grade School Classrooms* *The LOCKEROBE*

**Nation-wide Installations
manifest unanimous
approval—**

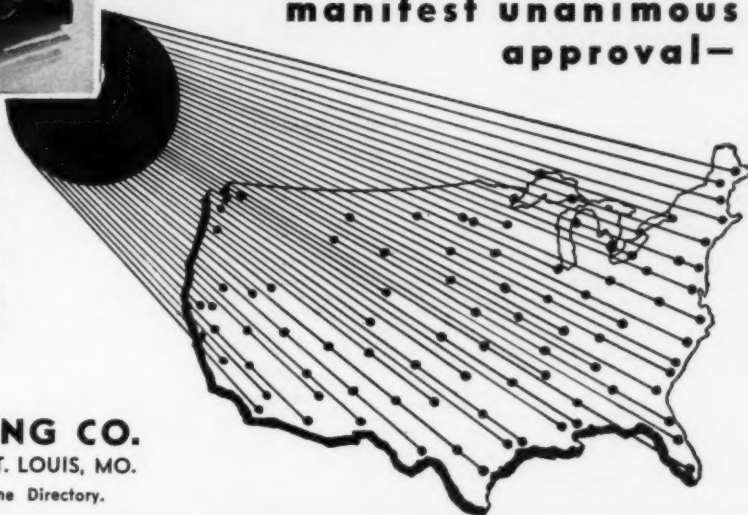
"Teacher Control" is probably the most important of many unusual features which distinguish Medart Lockerobes. . . . The opening and closing of one pair of Master Control Doors, opens and closes all other doors in the entire assembly. Noise, confusion, and risk of injury to pupils is thus replaced with orderliness, efficiency, and utmost safety. . . . Write for catalog and complete details. . . .

FRED MEDART MANUFACTURING CO.

3532 DE KALB STREET

ST. LOUIS, MO.

Sales Engineers in All Principal Cities—Consult Your Telephone Directory.



FIRST AID

WOUNDS—
however small,

may become infected. The prompt use of an effective antiseptic is an important preventive measure.

MERCUROCHROME—2% Solution, H. W. & D.—is a potent germicide and is non-irritating and non-toxic when used in wounds. It is used by physicians and in the leading hospitals.

Literature and a sample bottle will be sent on request.

This seal denotes acceptance of Mercurochrome for New and Non-official Remedies



by the Council on Pharmacy and Chemistry of the American Medical Association.

HYNSON, WESTCOTT & DUNNING, Incorporated
Baltimore, Maryland, Dept. N.

Please send me a Mercurochrome Applicator Bottle for personal use.

NAME

ADDRESS

NOTES FOR BUYERS . . .

Birth Announcement

Our ideas of a futile campaign would be to attempt to interest the Ditto family in birth control. For the Dittos will go blithely on reproducing, duplicating and dittoing until doomsday.

Within the month we have received another birth announcement from the Ditto home on Harrison at Oakley Blvd., Chicago. The new Ditto baby is a small affair but sturdy and attractive, we are told. He is so easy to handle that a fifth or sixth grade child can manage him. They feed him by hand, and he is a real Ditto in that he assimilates simply anything that is poked into him.

The parental boast is that this little bunch of gelatine and frame can go purple, red, green, blue, black, yellow, brown and orange all at the same time. Mr. and Mrs. Ditto, we congratulate you; Nature is even more marvelous than we had thought.

Tools of Peace

Even the fire arms and munitions manufacturers can do nicely without war, thank you, their peacetime pursuits being so pleasant. Take Colt's. What that company does not make besides fire arms isn't much and certainly isn't dishwashing machines. We mean it certainly is dishwashing machines. We mean dishwashing machines are certainly made by Colt's.

If the dishwashing situation doesn't strike you as exactly tense, it's because your school cafeteria is not synonymous with big business. There are schools having 5,000 or more daily lunchroom patrons. Always kitchen space is at a premium.

Live news for such as these is the new Colt model, designed to do a sloshing big job in a cramped space. We can't describe it here, but it's a gem. Our suggestion is that you request details from the Autosan Machine Division, Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn.

Plus and Minus

Wallace Beery spent four years in fourth grade. One day in comprehensible discouragement he joined a circus as elephant trainer. His academic downfall is attributed to fractions.

Now comes another bothersome classroom problem with such a simple and straight-forward solution as can be easily grasped even by the boys of the Beery

brand. We refer to the new "plus and minus frame," a feature of the latest school desk by the Irwin Seating Company, Grand Rapids, Mich.

In solving this school seating and posture problem, the rod connecting seat and desk is merely extended so that the desk fits the individual pupil. This new plus and minus feature also serves as a self-leveling device, so that the one-piece movable desk need no longer rock or vibrate on an uneven floor.

Hall of Fame

We nominate for our this month's Hall of Fame one with an excellent footing in halls of learning—J. M. Asphalt Tile. Our nominee's colorful personality and air of quiet dignity and dependableness permit him to take the floor in any classroom or assembly with exceptional grace. Clean, handsome, easy to handle, this modern school product does credit to its parentage, Johns-Manville of 22 East 40th Street, New York City.

Rings on Their Fingers

The younger generation is so enchanted with the rings on their fingers that they don't ask for bells on their toes as they make music on the school Coronas.

With a ring on every finger and at least one thumb and with a different animal and color on every ring, is it any wonder that typewriting has become a favorite game? The rings correspond with the animal keyboard, and very young children may learn the touch system by tapping Cock Robin or Mickey Mouse or Elmer Elephant.

L. C. Smith & Corona Typewriters, Inc., Syracuse, N. Y., is every bit as tickled as the children over its animal keyboard, its instruction book with gay verses and its new effortless shift. The floating shift, by which one goes from small letters to capitals by moving the type only and not the carriage, is unique on the portable typewriter. It cinches the appeal to elementary pupils, for it takes away from the little finger the strain of shifting.

Hand Book

We don't mind going lit'ry, for the nonce, just to proclaim our Book of the Month. It's the new edition of a modern classic for school engineers—the Dunham Hand Book No. 514.

Readers will find great warmth of feeling in this gallant exposition of modern steam-heated life. The author's preference for a "system that circulates subatmospheric steam under variable temperatures" is too well known for comment. His staccato prose is admirably adapted to the material.

The book's 464 pages are chock full of engineering information and include chapters on auxiliary steam services and miscellaneous facts and tables. If you would like a copy, write on your letterhead to the C. A. Dunham Company, 450 East Ohio Street, Chicago, and one will be sent you for New Year's.

Our Aunt Abigail

Aunt Abigail was forever telling us that the Little Things are really the Big Things in Life. We thought of the old girl today as we made a purchase.

Look at this vest pocket object—a Sight Light Indicator. Put it down anywhere, in any position. See, it registers the intensity of the light.

Think what this little object will mean in your classrooms. It will tell whether each child has enough light on his desk for efficient sight. It saves eyes, and if there is anything more precious to save you couldn't name it.

This sensitive little instrument is made by the same firm as the Sight Meter, the Sight Light Corporation, 342 Madison Avenue, New York City. It needs no batteries or outside current supply. It costs little. And it indicates intensities from 0 to 250 foot candles.

Affair of Heart

Our pet school engineer is a regular turtle. He is just an old softie under his thick crust. We recently learned that he has been carrying on a romantic love affair with a zeolite plant. He grows lyric as a skylark as he talks about his love.

For years hard water made the life of our engineer hard. He had continually to contend with scale formation in the boiler tubes. Repairs and replacements were frequent; costs high. In the washrooms the bowls were caked with dirt and the waste in soap was a scandal.

Zeolite softened water has had a delightfully softening effect on our engineer's life and disposition, as well as on plant operation costs. His regard for zeolites is shared by engineers of some 30,000 industrial plants and by 175,000 home-owners, we learn from Eskel Nordell, whose recent paper on "Zeolites: Mining, Processing, Manufacture and Uses" is available from the Permutit Company, 330 West 42nd Street, New York City.

HISTORY



"A narration of facts and events arranged chronologically or otherwise with THEIR CAUSES AND EFFECTS."

—Definition from a Dictionary

To show "CAUSES and EFFECTS" is one of the major objectives to a thorough understanding of American History. Progressive American History teachers have found that PICTURES, ILLUSTRATIONS, printed right on maps, humanize American History, make it a live, fascinating story instead of a collection of factual material.

That is why so many teachers are using The TRYON ILLUSTRATED AMERICAN HISTORY MAPS. They find that no approach to history accomplishes such gratifying results. If you are not now using this equipment, it will be worth your while to investigate.

Send for FREE History Teaching Aids—Address Dept. M121

WEBER COSTELLO CO.
PUBLISHERS - - - CHICAGO, ILL.

CORROSIRON

ACID RESISTING HIGH SILICON IRON
FOR DRAIN LINES

Form which we suggest be included in
your Specifications:

All acid proof drain pipe and fittings shall be of ferro-silicon—**CORROSIRON**—or equal to comply with the following analysis:

"All acid waste and acid vent piping shall be of approved high silicon cast iron pipe and fittings of the bell and spigot type. The cast iron for acid waste and vent pipe and fittings shall contain:

"Not less than 14.25% and not more than 15% silicon.
Total carbon content below 1.12% and above .50%.
Manganese below .50%.
Sulphur below .05%.

"High silicon cast iron pipe and fittings for acid waste and acid vent pipe shall be of the thickness, etc., corresponding to extra heavy soil pipe and fittings unless otherwise approved."

CORROSIRON manufactured by Pacific
Foundry Company, Ltd.

3100 Nineteenth St., San Francisco

1400 So. Alameda St., Los Angeles	551 Fifth Ave., New York	1713 Missouri St., Houston, Texas	330 Central Bldg., Seattle, Wash.
---	--------------------------------	---	---

AT LAST! RECENT FIRST RUN PRODUCTIONS IN 16 MM SOUND-ON-FILM

—and the latest model
projector with no down
payment required.

Now your school can enjoy the advantages of instruction from sound pictures, without any drain on the school budget. We will install one of the latest 16 mm sound-on-film projectors in your auditorium, provided you take our semi-monthly service of specially selected and edited entertainment films. You may use the projector for industrial and educational films without charge. A nominal admission fee will more than cover the low rental cost of the entertainment programs. The projector is yours as long as you use these programs. **NO DEPOSIT IS REQUIRED!**

A few of our new exclusive 16 mm Sound Masterpieces:

George Arliss in the "Iron Duke"
"Chu Chin Chow"

The famous Gaumont-British Production:
"Princess Charming". Evelyn Laye in a
delightful musical romance.

Write for special School Plan C, and our 1936
Sound-on-Film Catalogue.

FILMS

INCORPORATED

(formerly Home Film Libraries, Inc.)

500 FIFTH AVENUE, NEW YORK CITY

NOW You Can Have Quality Sound
for a trifle more than Silent Cost!

VICTOR

MODEL 25
Sound-on-Film
ANIMATOPHONE
Complete
\$360.00

Model 25 ANIMATOPHONE is the world's lightest, most compact, lowest-priced High Quality Sound Picture Reproducer. For only a trifle more than Silent Cost, it provides the facilities for running both Silent and Sound Films. (Total weight, 45 lbs.) Its Performance Ability is a known and proven quantity . . . for it embodies the same features that have made VICTOR'S Super Hi-Power Model 24 the world's most widely used 16 mm Sound Projector.

ANIMATOPHONE 25 will amaze you . . . Arrange NOW to see and hear it! (Operates on either A. C. or D. C.)

VICTOR ANIMATOGRAPH CORPORATION
DAVENPORT, IOWA, U. S. A.



**POSITIVE
CONTROL**

**CORRECT
LUBRICATION**

NORTON

DOOR CLOSERS insure long, efficient service because all working parts are properly lubricated with mineral oil eliminating practically all friction and wear. Norton Door Closers are **LEAK PROOF**.

WRITE FOR THE NORTON CATALOG

NORTON DOOR CLOSER COMPANY

Division of the Yale & Towne Manufacturing Company

2904 N. Western Ave.

Chicago, Illinois

DOOR CLOSERS FOR ALL SCHOOL DOORS

Schools Everywhere



choose these
**MODERN
FOUNTAINS**



School authorities and architects everywhere recognize the superior sanitary advantages of Halsey Taylor Drinking Fountains.

Practical automatic stream control and non-squirting two-stream projector safeguard against contamination! Write for our latest catalog, illustrating and describing the complete Halsey Taylor line. **THE HALSEY W. TAYLOR CO.**, Warren, Ohio.

**SPECIFY
HALSEY TAYLOR
DRINKING FOUNTAINS**

THE BOOKSHELF • • •

SPOILS FROM A CROWDED LIFE. By Porter Sargent. Boston: Bruce Humphries, Inc., 1935. Pp. 112. \$2.

This collection of poems of various shades and hues is worth the reading.

THE MEASUREMENT OF TEACHING EFFICIENCY. By William H. Lancelot and Others. Edited by Helen M. Walker. Kappa Delta Pi Research Publications. New York: The Macmillan Co., 1935. Pp. xxiv+237. \$2.25.

The first of a rather ambitious series of publications in the research aspect of instruction.

THE BACKGROUNDS AND FOUNDATIONS OF MODERN SCIENCE. By Richard E. Lee. Baltimore: The Williams & Wilkins Company, 1935. Pp. xxv+536. \$4.

An integration of the natural sciences as an orientation course for the thirteenth year. Designed specifically to meet the need for a synoptic view as a basis for specialization.

A PARALLEL CHRONOLOGY OF PAINTERS FROM 1250 TO 1800. With an Appendix of Nineteenth Century Painters. By Margaret Britton. Chicago: Harold H. Laskey, 520 N. Michigan Avenue. (In folder form.) Paper cover. \$1. These parallel chronological tables of painters are valuable as reference adjuncts in fine arts.

ECLIPSES OF THE SUN. By S. A. Mitchell. Fourth Edition. New York: Columbia University Press, 1935. Pp. xvii+520. Illustrated. \$5.

An essential complement of every secondary school science library is this newly revised edition of a work accepted as standard for more than a decade. Information gleaned from the 1932 and 1934 eclipses are included.

WAR MEMOIRS OF ROBERT LANSING. Indianapolis: The Bobbs-Merrill Co., 1935. Pp. 383. \$3.50.

Another link in the vast record of the World War by a man who had much to do with our participation. Illuminating and readable.

EDUCATION OF THE SLOW-LEARNING CHILD. By Christine P. Ingram. Yonkers: World Book Company, 1935. Pp. xii+419. \$1.80.

Practical suggestions for the organization of special education by a city school specialist. Has a fund of worth while information and suggestions for the superintendent and principal.

THE SCHOOL FOR THE CHILD FROM TWO TO EIGHT. By Isle Forest. Boston: Ginn and Company, 1935. Pp. ix+286. \$1.80.

Lecture notes woven together into a book that seeks to show methods and practices in securing better coordination of preprimary (nursery and kindergarten) and primary education. An interpretation rather than a contribution in the creative sense.

A HISTORY OF SCIENCE, TECHNOLOGY AND PHILOSOPHY IN THE 16TH AND 17TH CENTURIES. By A. Wolf. New York: The Macmillan Co., 1935. Pp. xxvii+692. 316 illustrations. \$7.

An outstanding achievement in an intricate and involved field. Never dry or pedantic, this valuable account is interestingly presented with a wealth of illustration. The physical, biologic and social sciences are treated comprehensively and with a mass of valuable references. Recommended highly as a reference for upper secondary and college libraries.

GREGG SHORTHAND

Taught in the public high schools of 99.46% of the cities and towns in the United States where instruction in shorthand is offered.

RELATIVE STANDING OF SYSTEMS

Shorthand System	Cities and Towns or Public School Systems	Percentage
Gregg	9117	99.46%
14 Other Systems	50	0.54%

Ask our nearest office to send you pamphlet entitled "Ten Facts About Shorthand"—a remarkable story of success and achievement. Of interest to every teacher and school executive.

Mention this magazine.

THE GREGG PUBLISHING COMPANY

New York Chicago San Francisco Boston
Toronto London Sydney

The Unit-Activity Reading Series

By NILA BANTON SMITH

This series is more than a reading series. It provides basic material for an **integrated program** of child development.

The material is organized into units based upon centers of interest. Each selection included in the material for a unit of work makes its own contribution. The complete material of the unit is interpreted to develop organized concepts and form a basis for constructive attitudes about the phase of life that forms the center of interest.

The low vocabulary burden per page and systematic repetition of vocabulary make these books unusually easy.

Write for information about the rich program of accessory material.

Silver, Burdett and Company

New York Newark Boston Chicago San Francisco



Ambrite

For holiday projects both on blackboard and paper Ambrite gives most gratifying results to the teacher. It represents perfection in colored chalk crayon. It is one of the famous Tuned Palet mediums.

DO YOUR TEACHERS HAVE AMBRITE?

• Send for samples, folder or price information.

*REG. U. S. PAT. OFF.

THE AMERICAN CRAYON COMPANY

515-615 HAYES AVENUE, SANDUSKY, OHIO • 200 FIFTH AVENUE, NEW YORK CITY
116 NEW MONTGOMERY STREET, SAN FRANCISCO • SANTA FE BUILDING, DALLAS, TEXAS

YOUR DIPLOMA reflects the character of your school



*Write for
complete
information
today.*

WELCH

Over 50 years of
Service to Schools

W. M. WELCH DIPLOMA HOUSE

1519 Sedgwick St. CHICAGO, ILL.

Gentlemen: Please send me samples of diplomas. We prefer Book _____ Size _____

Flat _____ Size _____

I would like prices and details.

We have _____ pupils in the Senior Class.

Institution _____

Name _____ Official Position _____

City _____ State _____



An Excellent Binder for Your Copies of *The NATION'S SCHOOLS*

THE above binder illustrated holds two complete volumes of *The NATION'S SCHOOLS*—twelve issues . . . It is durably made of black imitation leather with title stamped in gold . . . Copies of the publication can be inserted as received . . . Thus the binder serves both as a convenient file and as a permanent reference volume for your shelves.

\$1⁵⁰ each, postage extra

• Send your order to us and we will see that it is promptly filled.

The NATION'S SCHOOLS
PUBLISHING CO., INC.

919 NORTH MICHIGAN, CHICAGO, ILL.

THE CARE OF THE PUPIL. THE INGLIS LECTURE, 1935. By Samuel S. Drury, Cambridge, Mass.: Harvard University Press, 1935. Pp. 71. \$1.

A sane and worth while discussion of the adolescent boy and his school by a great teacher and a wise observer. An initial contribution from the private school to the Inglis series.

FREEDOM OF THE PRESS. By George Seldes. Indianapolis: The Bobbs-Merrill Co., 1935. Pp. xv+380. \$2.75.

This book should be read several times by every member of the teaching profession. It's important and worth while. No secondary social studies library can be considered complete without it.

WHAT IS THE ACTIVITY PLAN OF PROGRESSIVE EDUCATION? By Samuel Engle Burr. Cincinnati: The C. A. Gregory Co., 1935. Pp. 213. \$1.60.

Philosophy and practice of the much discussed "activity plan" of progressive education. Distinctly valuable in presenting a viewpoint and a plan that emotional discussion has made quite hazy to the average schoolman.

THE DIVORCE COURT; OHIO. Volume Two. By Leon C. Marshall and Geoffrey May. Baltimore: The Johns Hopkins Press, 1933. Pp. 440. \$3.50.

The second of a significant series of primary studies in the field of divorce. A scientific attempt to separate traditional emotional cloudiness from an extremely important sector of human relations.

THE DEVELOPMENT OF THE CITY SUPERINTENDENCY OF SCHOOLS IN THE UNITED STATES. By Theodore Lee Keller. Philadelphia: Published by the Author, Bennett Hall, University of Pennsylvania, 1935. Pp. xvii+339. \$2.50.

Superior contribution to the literature of the history of administration. Developed in scholarly manner from primary sources, this furnishes a reference text of value to any city school system.

THE GOVERNMENT OF HIGHER EDUCATION. By Edward C. Elliott, M. M. Chambers and William A. Ashbrook. New York: American Book Company, 1935. Pp. xiv+289. \$3.50. (Quantity supplies at \$2.80, f.o.b. Chicago.)

A handbook designed for the use of university and college trustees in a field that is both complicated and puzzling. Derived in part probably from a more detailed technical study of higher institutional control by the same authors under foundation auspices.

THE SOCIAL SCIENCES AS SCHOOL SUBJECTS. By Rolla M. Tryon. Report of the Commission on the Social Studies, Part XI. New York: Charles Scribner's Sons, 1935. Pp. xiii+541. \$3.

A review of the social studies in the schools with some rational observations concerning the gap between theory and accepted practice.

HOW TO LOCATE EDUCATIONAL INFORMATION AND DATA. A Text and Reference Book. By Carter Alexander. New York: Bureau of Publications, Teachers College, Columbia University, 1935. Pp. xxvi+272. \$3.

A publication that should be welcomed warmly by all educationists, particularly that group whose special task lies in initiating the younger student in the techniques fundamental to research. Valuable for superintendents and principals.

STATISTICAL PROCEDURES AND THEIR MATHEMATICAL BASES. By Charles C. Peters and Walter R. VanVoorhis. State College, Pa.: School of Education, The Pennsylvania State College, 1935. Pp. vii+363. \$1.50.

The first book in statistics to be printed by the photo-offset process. Very readable. Attempts to simplify statistics by approaching the subject from calculus.

CONTENTS

For February, 1936

Side Glances—

SECTION I—EDUCATIONAL ADMINISTRATION

Looking Forward	13
This month THE EDITOR takes up a teacher guild, schools and safety education, state teachers' contracts and the convention.	
Six General Principles of Curriculum Revision.....	16
WILLIAM MARTIN PROCTOR, professor of education, Stanford University, suggests desirable guide lines for executives to follow in constructing courses of study.	
Education Through Environment	18
The great Cranbrook adventure, a story of six interrelated institutions, is told by WILLIAM A. FRAYER, now executive secretary of the Cranbrook Foundation and formerly professor of history at the University of Michigan.	
Recent Technologic Changes and Their Significance for Education. 23	
An industrial diagnostician, WALTER N. POLAKOV of the FERA, warns the schools that they must quit crippling children by trying to make them fit into the past century pattern.	
Suggested Rules for Boards of Education.....	26
DEAN W. W. KEMP of the school of education, University of California, sets down eight fundamental administrative rules that a city board of education should adopt as a platform upon which it proposes to deal with the superintendent it has elected.	
Class Size Does Make a Difference.....	27
And a significant one in the effectiveness of the high school teacher, particularly in her knowledge and understanding of her pupils. So H. LEIGH BAKER of the department of psychology, Simmons College, found in the study here described.	
The 1937 Yearbook.....	29
SUPT. FRANK G. PICKELL of Montclair, N. J., writes the Department of Superintendence page this month, outlining the comprehensive plans of next year's Yearbook Commission.	
Rockford's Broad Program of Health Education.....	30
The supervisor of health and physical education of the public schools, Rockford, Ill., RUTH E. LINS, describes in some detail the four divisions of the school health program she supervises: health service, health instruction, buildings and grounds, and physical education.	
Troublesome Situation in California.....	34
Where for each high school principal employed there exists four others who are highly trained and fully certified. H. DEWEY ANDERSON, director of Stanford University Occupational Study, and ELLIS G. RHODE, supervisor of the Emergency Educational Program, California Department of Education, write factually and feelingly on the subject.	
Music in the Elementary Schools.....	36
IRIS TIMSON, music supervisor in the school at Brule, Neb., discusses changing goals in school music. Music teachers of tomorrow, she believes, will not try to make musicians of their pupils but to establish high ideals of beauty and emotional values.	

YOU remember

how, last year, you arrived home well spent from a well spent week in Cleveland to find the March issue of THE NATION'S SCHOOLS sticking out of the postman's bag. You flipped speculatively through its pages, and were amazed to learn that more went on at the Department of Superintendence meeting than had met your eye and ear.

The front of the book, you recall, contained many of the more spectacular convention papers and the news section, spotted over with portrait busts of important conventioners, gave an adequate news recording of that hurried, exciting and well nigh sleepless week.

SO MANY like you

wrote in praise of our speed and diligence that we have been flattered into extending ourselves in the same direction this year. The NATION'S SCHOOLS will therefore be rushed to your desk again this March, bearing eleven of the convention headlines and the remainder in essence.

YOU may count on

us for publication of Doctor Stoddard's presidential, "the public's school"; for Dr. Charles A. Beard's "scholar in the midst of conflicts"; for Commissioner Studebaker's federal rôle; for Chairman Glenn's yearbook summary; for the Judd-Mort-Coffman federal aid symposium; for N. E. A. President Samuelson's rural schools; for President Crane's (Wyoming) radio message; for Director Rainey's American youth problems.

Rely on us too for eight pages of editorial coverage of the convention and a couple of pages describing the new equipment on display. And now that we have made these promises, don't decide that you may as well stay at home. Much as we should like to, we

Published monthly by The NATION'S SCHOOLS PUBLISHING Co., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

CONTENTS

cannot bring you the real spirit of St. Louis (no pun intended) and of the convention. To get that, you have to go there and put some of yourself into the meeting. President Stoddard tells on pages 68 and 70 of this issue how every one of you may participate.

SANDWICHED in between two older buildings is a thoroughly modern structure which corrects many of the deficiencies of the other two and brings up to date the school plant of the Technical High School, Springfield, Mass.

Burton A. Adams, the superintendent, has described for readers of *The NATION'S SCHOOLS* the modernized plant, stressing particularly the superior accommodations for cafeteria and kitchen. Illustrated with photographs and floor plans, this high school's modernization program will constitute the leading article for Section II of the March issue.

ONE way to acquire a public address system at small cost will be described in the next number by W. F. Currington, school custodian, Jackson, Ohio. The high school graduating class presented the school with an amplifying system, and superintendent, principal and custodian put their heads together to complete the job.

The fact that the original wiring of the building included the installation of loudspeaker wiring to the classrooms made the problem simpler, of course. But this custodian thinks that buildings not originally equipped with concealed wiring can install a public address system at not much greater expense. He itemizes every single purchase made and describes its installation.

"FOOD Buying Based on Fact" is an article scheduled for March that should be required reading for all cafeteria managers. The author is Etta H. Handy, director of dining halls, Eastman School of Music, University of Rochester. Miss Handy holds that the purchasing of food has become chiefly a matter of utilizing available technical information wisely.

The Best Employment for American Youth..... 39
Remove young people from the ranks of unemployed by extending the period of full-time school attendance, urges M. M. CHAMBERS, staff member of the American Youth Commission and specialist in school law.

A County Superintendent Proposes..... 41
Not marriage, but a unique plan for developing school leadership, promoting legislation and choosing state boards. A. E. CONDON, superintendent at Lake County, Indiana, makes the proposal.

Happy to Say 42
Actually most Scotchmen have generous hearts, including our WILLIAM MCANDREW, who this month is mailing out Valentines. We have room for nine of them.

SECTION II—THE SCHOOL PLANT

Bismarck High School, Bismarck, N. D..... 43
Entrance detail of new high school designed by RITTERBRUSH BROTHERS, Bismarck architects, and their associates, HEWITT AND BROWN of Minneapolis.

Three Units in One With Room to Grow..... 44
Nothing better illustrates the growth of civilization and culture in the prairies of North Dakota than the new \$450,000 Bismarck High School, here described by H. O. SAXVIK, superintendent of schools.

Let There Be Less Noise!..... 49
CARL J. ECKHARDT, JR., adjunct professor of mechanical engineering, University of Texas, describes the acoustical treatment of the new Gregory Gymnasium, which when used as an auditorium seats 10,000 persons.

More Federal Funds for Education 53
ALICE BARROWS, specialist in school building problems, U. S. Office of Education, tells of five new educational projects to be financed through emergency relief funds.

Mural Paintings in the High Schools of New York City..... 54
BEN KNOTTS, assistant projects supervisor of WPA Art Works in Public Buildings for New York City, obligingly furnished photographs of some of the work of artists on relief jobs.

"You May Go to the Board"..... 57
W. F. CREDLE, director of schoolhouse planning, North Carolina State Department of Public Instruction, writes entertainingly and instructively on blackboards, ancient and modern.

Tempting Foods Offset Outside Competition..... 62
How the school cafeteria can meet outside competition is told by MRS. HELEN VAN GILDER KASPER, dietitian, Macfarland Junior High School, Washington, D. C.

Parents Check School Menus..... 66
At the school lunch department, Falmouth, Mass., described by MRS. RUTH UNDERWOOD, the dietitian.

Program of Department of Superintendence Meeting Has Features of Unusual Interest 68
PRESIDENT A. J. STODDARD outlines the St. Louis program.

Better Plant Practices..... 56	Visual Education 78
News in Review 68	Radio Programs 80
Private Schools 72	Names in the News..... 82
Regional News 74	Notes for Buyers..... 86
Coming Meetings 76	The Bookshelf 88

LOOKING FORWARD

A Teacher Guild

ONE OF the fundamental needs of the teaching profession is the development of a strong teacher guild in which organization all those engaged in the profession of teaching (from nursery school through university) or its complementary activities (administration) may find membership.

The teaching profession has a peculiar status and responsibility. As agents of the state its members are confined in their interpretative activities to keeping the people informed of the value and needs of public education through normal and accepted means of communication. They are definitely confined, however, to working within the limits of the existing pattern and are professionally enjoined from using the schools as a means of advancing their own interests even when these may be in harmony with the increase of efficiency within school organization. Only as teachers and administrators perform their official duties in accord with the high tradition of disinterested service already established can they retain the full confidence of the public.

Organized as a guild, it is possible for teachers to act in their second relationship in the same moral manner as other interest-groups. As members of the guild, the teaching profession is entitled to present to the people continuously the requirements of public education and their own rational demands for adequate rewards, recognition, security and freedom in teaching. Acting in a professional capacity, the teaching profession thus transcends the difficulties and possible restrictions of local organization and becomes a dependable extra-legal appraisal agency for the people.

As a guild, the teaching profession has the responsibility for determining its own standards for membership and for improvement. It must develop a rational ethic as a basis for operation. It must offer protection to its members and at the same time be ready to discipline them for unethical conduct. It must protect both the institution and its members.

The organization of the teacher guild offers two definite problems, one in relation to the mechanics of organization and the other to professional (technical) interests. The guild may start with local chapters organized around the primary interest of the members—the school district or the institution. These local chap-

ters in turn will create the state federation or association by electing representatives to a state assembly. The national organization will then become a federation of state associations instead of hanging in space as at present and forming a parallel organization.

To meet the technical or professional interests there should be organized special interest or program-groups within each state for exchange of experience and general professional improvement. These may be organized regionally or for the state as a whole. In turn these state groups will also be organized as national groups. Such groups would include teaching and administration with refinements or specialization within each group to meet all professional requirements. Thus the Department of Superintendence could start with regional conferences organized in turn into state conferences and finally culminating into the present national conference. This type of coordination will make for more effective professional organization. The organization aspect of the teacher guild could be kept entirely separate from the technical interest aspect. Business meetings would be confined to the purpose in hand while professional conferences could be held at other times.

What are the possibilities for the development of the teacher guild? Is there any chance that the diverse and power-conscious minority groups or interests now operating will actually be willing to subordinate themselves to the general welfare of the teaching profession? There are today at least ten active groups consciously or unconsciously striving for leadership. They include: the National Education Association, the Department of Superintendence, the American Federation of Teachers, Phi Delta Kappa, Extra-Legal Regional Accrediting Associations (dominating secondary education), the Progressive Education Association, the American Council on Education, the American Association of University Professors, State Associations of School Board Members, and the fraternity of Secretaries of State Education Associations. Is it possible that these diverse interest-groups, each with its own special purpose, will be able to see the larger problem and larger need of the teaching profession? Unless they develop vision and harmonize their differences the process of building a professional organization will take much longer.

The greatest potentialities for leadership lie with the National Education Association. However, until it

divests itself entirely of its Messianic policies and the fairly general feeling of domination by certain institutions, there is little hope. If the National Education Association would face the situation realistically and attempt to build a national teacher guild by bringing together the state education associations in a single federation, it would represent immediately approximately one-half of the teaching profession. If it continues along its present path its leadership possibilities are low.

Apparently the committee on longer planned programs of the Department of Superintendence had this question in mind when it voted to remain as a professional department of the National Education Association and work for a unified profession through this body, contingent on reform. This decision is a hopeful sign to the profession. If one powerful group can make this decision the others also may find it possible. It is to be hoped that the parent organization will give respectful ear to the rumblings and dissatisfaction of its most powerful department.

Even under favorable conditions the organization of a teacher guild will require some time. It cannot be accomplished overnight. It is quite possible to set a policy at the present time and attempt to integrate the profession before there is further development of minority interests to make the task harder.

Education in Safe Living

THE terrific and steadily mounting toll of traffic accidents has at last focussed popular attention upon some means of reducing both the crippling physical aftermath and unwarranted death. Leaders and newspapers have become highly morbid in their efforts to solve the problem through sentimentality and mere publicity. Attention has also been given to the schools and demands for the inclusion of courses in safety and in automobile driving are being insisted upon by lay interest-groups, including chambers of commerce.

As usual, the mistakes inherent in every high pressure campaign are beginning to appear in this almost frantic safety drive. Unfortunately the problem is not so simple and cannot be solved overnight by these methods. It might be better if these local groups and newspapers added to their committees specialists from the National Safety Council or its local branches so that the entire problem might be reviewed, and long-time plans laid for effective accident reduction.

The problem of traffic accidents is in reality five-fold, and unless every aspect is considered and progressively solved, little of permanent value can be accomplished. The first set of problems has to do with physical conditions. So long as streets, designed for horses and bicycles, are used without change for high-powered automobiles there will continue to be accidents. Elevated speedways, underpasses or streets specially ad-

justed to motor traffic and properly administered, might be one solution. The progressive elimination of unnecessary side streets would certainly help. Scientific control of traffic, so that automobiles might be used more than fifty per cent of the time, would also help. Physical conditions must be adjusted to meet power age demands.

The second set of problems resolves itself around the agency itself—the motor car. Recent tendencies toward excessive speed are undoubtedly a heavily contributing factor in accidents. However, the motor cars with their increase in speed are far better equipped for modern needs than the streets on which they run or the people who guide them. Some feel that the solution is a governor to cut down engine speed. The American wants speed and will get it. Even so conservative a builder as Henry Ford recognizes this requirement. Engineers also tell us that the car can be much improved. That is a field for further experimentation.

The third series of problems is concerned with the driver. Present lack of proper physical and mental qualifications for the driver, not too rigid inspection of driving skill and a general tendency to be slack in administration of driving makes the problem of the agent one of the vital factors. The abuse of alcohol has certainly been a contributing cause but probably not to the extent that some groups imagine. Until the driver of an automobile in every state is required to pass the same tests for fitness as the locomotive engineer, there will continue to be serious trouble regardless of what is done to either roads or machines. Physical fitness must be demanded even though it reduces somewhat the sale of cars.

Administration of traffic covers the fourth field of problems. The confusion growing out of lack of uniformity in traffic laws, slack administration by amateur as well as professional police and by the courts are significant in their relation to accidents. Inadequate traffic signals and their hit-and-miss rather than scientific regulation also contribute. The confusion of red lights with trade signs is a real danger factor. There must first be intelligent declaration of law through sensible statute and then rigid administration of these statutes. Until the fourth series of problems is solved, there can be little hope for general amelioration.

Education is the fifth series of problems. Training of children in healthful, safe living, of which traffic problems are only one phase, should start in the kindergarten and continue throughout the secondary school as part of the health and physical education curriculum. It is also essential to provide for continued education of the adult in safe driving. Possibly these drivers' schools might be administered by the public schools as part of the adult education program. Special driving fields or laboratories for teaching should also be provided to keep the beginning amateur off the street.

It is possible to teach children to live safely, as the

records of many of our city schools show. Courses in safety are nothing new to large city school systems. Here the problem was sensed as early as 1915. E. Bruce Payne in St. Louis and Harriet Beard in Detroit did pioneer work in this field. Measured results of safety teaching in schools indicated that it was possible to cut accidents to children to a minimum. The records in school shops and laboratories bear eloquent witness to this fact.

As safety teaching spread in the schools since the war, in cooperation with the National Safety Council, it was also proved that children could be protected from rational traffic hazards. Reckless driving in faster cars on streets and highways constructed on the pattern of the "nineties" with haphazard, poorly devised and irrational administration have combined to make the school's task hopeless unless these other four groups of problems can be solved. The school cannot perform unreasonable or superhuman tasks.

State Teacher Contracts

THE complaints of teachers against specialized discrimination by means of local district contracts are too well sustained to require much additional proof. Dr. Dennis H. Cooke in his two articles on "Blue Law Blues" in the October and November, 1935, issues of *The NATION'S SCHOOLS* produced sufficient evidence and just barely scratched the surface.

Outside of well organized city school systems and those states already operating on either permanent or continuing tenure which provides for terms of contracture for services, all sorts of petty restrictions and annoyances are placed upon teachers in both their professional and personal lives. While these religious, racial, social and political restrictions are manifestly illegal in many instances, yet the voluntary agreement by the teacher to abide by them makes it difficult to secure redress. The further inability of professional organizations to protect their members from exploitation is an additional handicap. Most of the petty personal restrictions appear also in the rules of the boards of education, which are supplementary to the general contract.

Certain suggestions have been offered to solve these difficulties. Most of them revolve around the development of a general minimum contract for the state as a whole. While the state contract would be of real value in standardizing certain ill-advised current practices it cannot go far enough. It is highly desirable that even under general state contract sufficient flexibility be provided to meet local conditions. It is also essential in our plan of local control of administration of the program that boards of education be given authority to make their own rules. It is questionable, unless a highly centralized administration is planned, whether the state should attempt standardization at this particular point.

Since legislation will not furnish complete relief from these conditions, further possibilities might be profitably explored. The creation of a public opinion which would refuse to sustain personal restriction on teachers is the only way in which these local diversions may be restricted. This public opinion must be built by the teachers organized as a profession and working through lay groups. The second recommendation is full and complete publicity upon all and any restrictions that tend to degrade the teacher and impair teaching. Again, the professional guild's responsibility in this field is obvious.

These restrictions are found largely in smaller areas. As in the case of tenure, there is little that can be accomplished in these minute and inadequate areas. The answer to this problem lies in reorganization of administrative areas into community districts where it is possible to attain wider cross sections of social points of view.

These four conditions, state contracts, dynamic public opinion, full publicity and administrative reorganization are necessary to the solution of this problem.

The St. Louis Convention

THE St. Louis program of the Department of Superintendence has been prepared with great care and foresight. President A. J. Stoddard, assisted by an excellent and well organized secretariat, has planned a meeting in which the greatest possible opportunity for individual expression is possible. Building upon the original plan evolved by Dr. Paul C. Stetson at the Cleveland meeting, he has provided for two programs devoted entirely to discussions of problems and sub-problems in the several fields of administrative activity. Opportunity will thus be provided for hundreds of executives to participate instead of merely to listen as in the more conventional programs of the past.

The general theme of the meeting will be "Next Steps in Educational Progress." Significant problems concerned with the improvement as well as continued recovery of the public school system will be stressed. Slightly more than 600 speakers will appear on the five-day program. Increasing recovery in spending for public education has attracted more exhibitors of educational products to this meeting than at any time since the advent of the depression. Hotel reservations indicate a record attendance. Every superintendent and principal who can possibly attend should do so, first, for the benefit to be derived from the meeting itself and, second, as an expression of professional morale. The St. Louis meeting promises to be one of the high spots in the history of the Department of Superintendence.

The Editor

CERTAIN general principles apply to curriculum revision whether such revision is undertaken on a small scale or on a large scale. These principles have to do primarily with the organization aspects of such service rather than the selection and organization of content material.

1. The first principle to be noted is that of the limited objective. The limited objective in curriculum making means simply, to use a homely phrase,—“Do not bite off more than you can chew.”

This may be illustrated in the program of the secondary schools that are cooperating with the Progressive Education Association in an experiment looking to better articulation between colleges and secondary schools.

Instead of undertaking to make over their entire program of study at one big orgy of curriculum revision, most of them have selected the social studies as the point at which to begin in their revision program. They know that if they are successful in introducing the principles of progressive education into that segment of the course of study, the instructors in other departments will become interested and want to undertake revision in their own particular fields.

Limited Objective Best

The limited objective has the further merit of attracting less attention from those opposed to any revision than would a grand smash all along the curriculum front. Likewise, it gives time for the gathering of materials, for the carrying out of exploratory experiments and for the quiet and unhurried demonstration in the classroom of the proposed changes.

2. The second principle is that there should be adequate exploration of the local situation before actual revision is undertaken. By this is meant that possibly a year or even

more should be spent in developing an adequate philosophy of education, for the critical analysis of the social situation at large as well as locally, for an understanding of the relationship between the present curriculum offerings and the needs and capacities of the children of the community under consideration.

Every Teacher Must Help

Every teacher in the system should be encouraged to read, study and discuss vital books and magazine articles bearing upon these issues. Not only should the teachers engage in such preliminary studies, but all community agencies directly interested in the schools should be encouraged to make similar studies. The part that community life plays in the education of the children should be particularly stressed in these early studies.

Such cooperative and coordinated studies by laymen and teachers should result in a better understanding by all concerned of the problems confronting the public schools, and should also result in a sympathetic attitude on the part of the community toward the revision program.

3. The third principle is that the revision should be directed toward a complete and socially desirable pattern, or end product. Is it an ideal citizen, or an ideal city, or an ideal state, or an ideal world that we want?

We cannot get all of these at once, hence is it not desirable to decide upon a reasonably attainable

goal and develop our curriculum reorganization with a view to making a contribution to the attainment of that goal?

The chances are that we shall move along faster if we set out at first to achieve the type of local community that we believe will contribute most to the ultimate pattern of a better state, nation and world. Aiming at the improvement of the social order, or the world in general, is to take in a large amount of territory.

The command of the great Galilean Teacher was not to love the world in general, but to “love thy neighbor as thyself.” When the smart lawyer attempted to establish an alibi by asking Jesus to define the word neighbor, the Master told the story of the Good Samaritan. Our neighbor is the man we actually help, not some person in India for whom we are very sorry.

Developing Contagion Centers

If we could manage to set up a few model communities in this country, where the community life would not be the negation of the habits, attitudes and ideals that we endeavor to cultivate in our schools and homes, the contagion would soon spread to the state and nation.

In order to begin the development of these contagion centers of improved social living it is necessary to have an effective plan of adult education as well as an appropriate program for child growth and development. As a matter of fact, it will be essential to educate the adults into new

Six General Principles

By WILLIAM MARTIN PROCTOR

of Curriculum Revision

Guide Lines for Executives in Constructing Courses of Study

and broader conceptions of the desirable pattern for a new social order, before we shall be permitted to carry out our plans for revising the curriculum of the public schools.

4. The fourth principle is that the program of curriculum revision should be a unified program. There should be no attempt at revision of the elementary curriculum alone, or of the junior high school, senior high school or junior college curriculums independently.

This statement may seem to be a contradiction of the principle of the "limited objective", but it is not necessarily so. It simply means that if revision of the social studies offering for the senior high school is attempted, it should be accomplished in relation to the revision of the social studies course of study for the entire school system, kindergarten through junior college. Similarly, if the first item on the revision program is to be a fused course made up of English and social studies, the fusion should extend from top to bottom of the school system.

Does Not Cover Township Highs

In situations in which the administrative units are under separate boards of control, as in the case of union or township high schools, this principle cannot be carried out. However, in city school systems and in county and state revisions, the principle should be followed.

5. The fifth principle is that of flexibility. Courses of study should not be worked out in minute detail and then imposed with administra-

tive rigidity upon all teachers concerned.

It is moreover desirable that there should be what is called a "frame of reference," namely, a well articulated plan of progression in the organization of the experiences to which the children will be given an opportunity to react. But within this framework in each grade and also within each segment of the school system, there should be permitted a wide range of choice of materials and methods. Otherwise originality and initiative on the part of the teachers will be destroyed.

The function of the framework is to ensure progression in types of experience, and to avoid overlapping and duplication in content materials. Its further function should be that of ensuring reasonable progress toward the ultimate goal or pattern of the entire curriculum.

Revision Must Be Continuous

6. The sixth principle is that of continuous revision. The curriculum should be a living and growing organism. It should be adapted to the needs of growing individuals and promote the continuous and progressive improvement of communities. But it cannot perform its true function unless it is so organized that it can be continuously amended.

Curriculum committees should be continuing committees. Even when there is fusion of fields of study there will always be need for persons who are more or less expert in the language arts, mathematics, science, social studies, art, music and the

basic industrial and homemaking arts, as well as in the realm of health and physical education. Curriculum committees should therefore be made up of all of the types of subject specialists who are necessary to contribute helpfully to the aims and purposes of the particular course of study that is being developed.

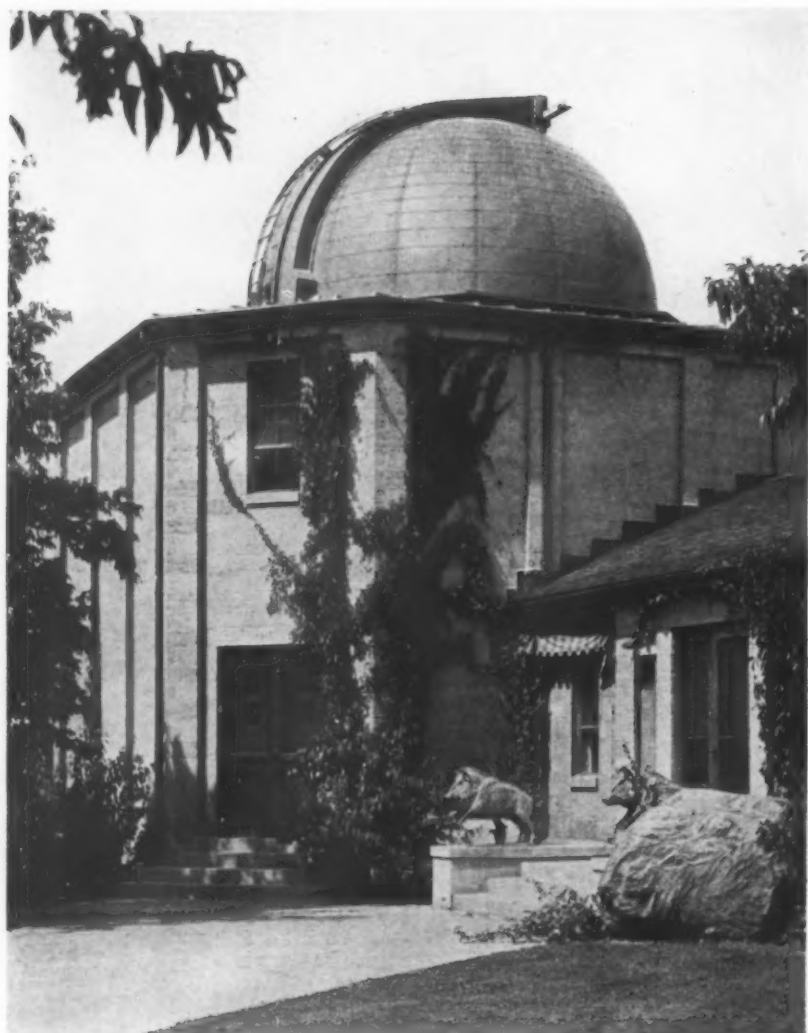
New members, with new viewpoints, should be added as the need arises for the contribution which they may have to make. But the committee should have a continuity of existence and should be charged with the responsibility of keeping the course of study thoroughly alive and up to date.

Details Are Omitted

It will be noted that details, such as the employment of a curriculum adviser or consultant, the different types of committees that should be appointed, whether there should be aims committees and production committees distinct from each other, whether there should be outside specialists called in on each major subdivision of the program, just how the curriculum committee of the whole should be set up, and a thousand and one other details that enter into the actual staging of a curriculum revision program have not been mentioned at all.

This omission was deliberate because there are so many different situations that a plan suggestive for one school executive would have no meaning to another on account of the difference in size and resources of the several communities. In any event, full discussion of the items enumerated above may be found in any standard book on curriculum construction.

I have simply endeavored here to pull out some of the more fundamental principles of curriculum construction and to suggest these as desirable guide lines for executives interested in undertaking programs of curriculum revision.



Observatory of the Cranbrook Institute of Science. Outsiders, as well as pupils, may participate in the institute's classes, nature walks and other scientific pursuits. This scientific institution was founded only five years ago.

Education Through Environment

By WILLIAM A. FRAYER

"I shall have another garden laid out tomorrow upon a nobler plan."
(Quoted by Bliss Perry from Voltaire's "Candide.")

IT APPEARS to be generally understood that educational methods are under indictment, which is a healthy sign and is natural enough since all our social processes are under fire. Evidently there is no perfect formula, no single magic way of doing anything. American education has passed through at least five

epochal changes already. It is reasonable to suppose that we may survive others yet to come.

On the extreme assumption that the radical innovators are 90 per cent wrong there would be 10 per cent of sound doctrine which we should gladly accept. There is little to choose between the smug complacency of the untouchables and the dogmatism of the left-wing "Progressives." Both groups must modify their views in the light of a riper ex-

perience. Meanwhile, all of us may well keep our minds open to the opportunities and responsibilities of a new day.

Here and there in the midst of confusion we find an unheralded enterprise of real promise. Such a one is Cranbrook, founded about ten years ago by Mr. and Mrs. George G. Booth on their estate in Bloomfield Hills, Mich., a lovely region of rolling country and lakes north of Detroit. Architecture of the first rank in the quiet charm of its natural setting harmonizes with the generous purpose of the donors who made possible six interrelated institutions.

Brookside School for children through the sixth grade, Cranbrook School for boys and Kingswood School for girls (both college preparatory), the Academy of Art, the Institute of Science and Christ Church Cranbrook are all outstanding in their respective fields. Each is largely self-governing, with its own income from endowment, while all are fostered by the central Cranbrook Foundation.

The name Cranbrook comes from a village in Kent where George Booth's father was born. Instinctively venerating the craftsmanship of his forbears, Mr. Booth himself inevitably became a craftsman and a connoisseur of the arts, a successful manager and proprietor of newspapers. For a time he was the producer of fine books (still much sought by collectors), a builder with vision and at length the chief creator of a great educational center dedicated to the state and to the people that gave him his opportunity.



West side court of Cranbrook School for boys. All buildings were designed by Saarinen.

Having long believed that the best way to keep is to give, Mr. and Mrs. Booth have placed at the disposal of others a wealth of opportunity to enjoy the best, to excel, to live in an environment of beauty and creative effort—and if possible to become creative in science and the arts. Here is offered the opportunity to learn that ugliness is both unnecessary and harmful, that everything commonplace is the enemy of fine discernment and that discernment lies near the heart of education.

In the Cranbrook adventure large sums of money have been staked in the belief that quality and creative endeavor are needed antidotes to flat standardization, whether in education or industry. If this assumption be wrong, the outlook is drab indeed.

Although no uniform policy has been imposed upon the several institutions at Cranbrook, a common pur-

pose actuates each one of them. Brookside School for younger boys and girls is pledged "to increase the love of service in the lives of those who shall be students here." Under the wise leadership of Jessie Winter since 1922, this school is operated on the country day school plan with a day long program of instruction and recreation for most of the hundred children who attend. Unstinted plans have been taken to create a beautiful environment that at the same time suggests accomplishment. Self-expression goes hand in hand with self-discipline. The result is a happy, simple and normal school life and a highly successful school.

Cranbrook School, planned to accommodate about 250 boys, occupies a group of buildings by Eliel Saarinen. For attractiveness and completeness they are believed to be unsurpassed. An all-around training in

an atmosphere of beauty and good taste is the clear objective. Here, as in the other schools, the resources of Christ Church, the Academy of Art and the Institute of Science are drawn upon freely. Surely there is a great advantage in being exposed to these influences. Any boy of imagination is stimulated by the opportunity to know creative men of worldwide reputation and to work with them later if he too carries the divine spark.

But what of the average boy, sound in body and mind, who does not aspire to science or the arts, who may not be preparing for college? He too has his place, as in many another good school, if his character and ability warrant his admission. Aptitudes of a high order which do not fit into accepted patterns may be discovered through a carefully balanced selective process, may be developed by unusual teachers dealing constantly with



Window and staircase in the Kingswood School for girls.



Court at Kingswood School, an example of Saarinen's originality.



Sculpture by Carl Milles appears in appropriate settings such as this.

individual boys in classroom, shop, hobby club or on the playfield. Numerous scholarships help in the search for the exceptional boy. George T. Nickerson is now the successful acting head master.

Great architecture and almost unrivaled equipment, especially in arts and crafts, however, do not ensure a school of corresponding rank unless there is active response to the environment. A magnificent stage is not enough. Masters and boys are therefore building traditions of hard work, hard play, self-discipline and good manners. The response to opportunity and environment cannot be questioned. Cranbrook School, strong today, should unquestionably become great tomorrow.

Kingswood School

Kingswood School for girls, like its counterpart for boys, is located on its own spacious grounds which also were once a part of a highly developed private estate. Each enjoys seclusion and individuality. Like the other four institutions they both are independent, save for the fostering care exercised by the foundation. While each has developed its own program there is a certain similarity in freedom and self-discipline.

The buildings of Kingswood School by Saarinen are well known, as are his Cranbrook School group, to technical planners and architects at home and abroad because of their brilliant originality and bold adaptation to modern needs. The artistic interiors, so arranged that the vistas of lake, woods and hills are most effective, once seen are not likely to be forgotten. The modern furnishings were designed in the studios of the Academy of Art and some of them were executed at Cranbrook.

Organized as a six-year high school with an optional year of postgraduate study and accommodating about two hundred resident and day students, the school is under the able leadership of Margaret Augur. One curriculum is offered in grades seven and eight. Beyond that point there are two curriculums, the college prepara-

tory and the general. Admission to college is by college entrance board examinations or by certification. Since the entrance requirements of the colleges and universities are becoming constantly more flexible, the interests and aptitudes of individual students are given increasing attention through close personal acquaintance supplemented by the tests of the Educational Records Bureau.

Many of the students in both preparatory schools come up from Brookside School, thus spending a possible twelve years in the Cranbrook environment. In Kingswood, too, considerable latitude is allowed in the choice of subjects and wide opportunities are offered for the cultivation of artistic and scientific talents. The studios, for weaving especially, are among the best to be found anywhere. Here again the rich facilities of the Academy of Art and the Institute of Science are freely available to the students.

The social advantages of this unusual community are apparent. The boys and girls of the larger schools meet at games, dances and other entertainments. Occasionally they collaborate in the production of plays and light operas of the Gilbert and Sullivan type.

Public v. Private Schools

Tuition charges in the Cranbrook schools are lower because of endowment than the advantages would justify otherwise. This brings up the odious comparison of public and private schools. Obviously the former are more important to our country at large, but it would seem that for a long time to come the latter will have an important contribution to make. Less and less, we believe, will the private schools reflect the fixed ideas of special classes. More and more will they attract youths of exceptional promise—or they will perish.

A decade ago William G. Thayer, famous head master of St. Marks, contended that the private school enjoys a large measure of freedom from outside control, which puts upon it the obligation to attract and nurture

the superior student; to cherish higher ideals than those of simply being a preparatory school; to raise academic standards and to produce leadership. I venture the opinion that these opportunities and obligations are even greater now than in 1925, but those who direct the destinies of our private schools must be wise, understanding and keenly aware of impending changes.

In the difficult times ahead, when science seems destined to remain firmly in the saddle, will there be a place in the sun for art of the highest distinction? If the eternal problem of art is to create new values who can doubt its fundamental reason for being? Who can doubt that its influence will wax rather than wane?

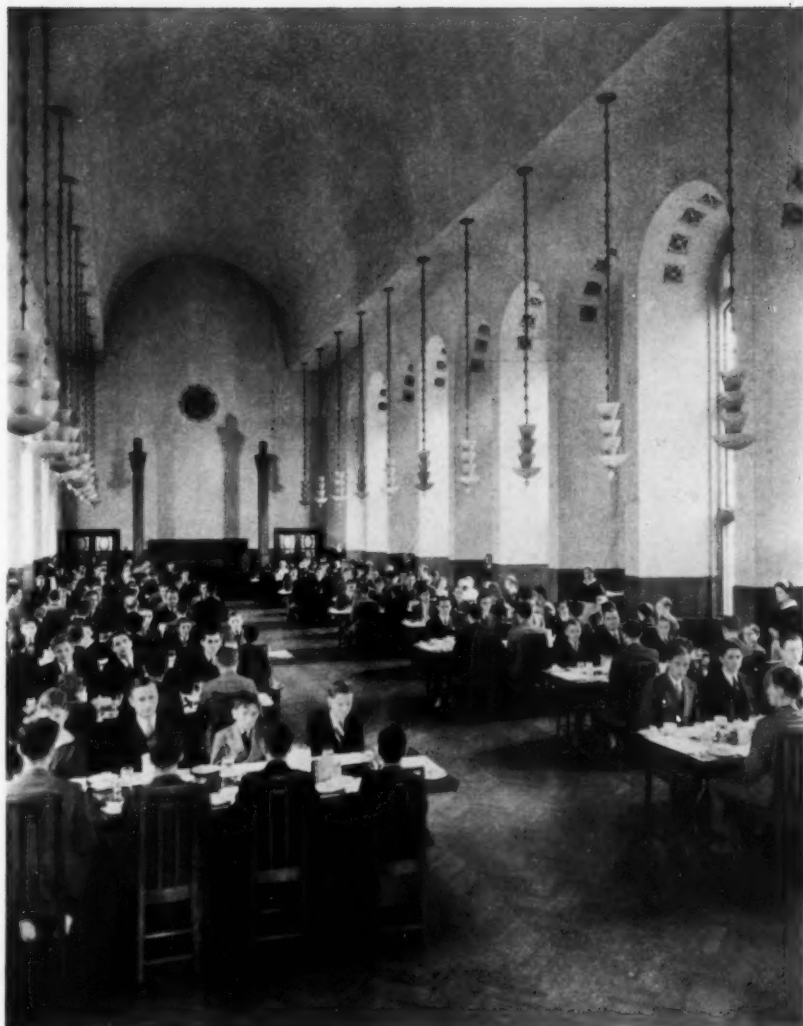
Academy of Art

"The Cranbrook Academy of Art was established in 1928 for the purpose of advancing artistic development and culture in America." An academy in which there are men of the eminence of Saarinen in architecture and Milles in sculpture already stands justified before the world. The influence of these men through their numerous works at Cranbrook and in many American and European centers is indeed great. Not least is the immediate influence upon their own gifted groups of students and the stirred ambitions of boys and girls in the Cranbrook schools.

Mr. Saarinen is president of the academy. A small number of carefully selected advanced students work under his direction—at present largely in the field of city planning. Ambitious young sculptors come great distances to work in the studios of Carl Milles, painters to study under Zoltan Sepeshy.

The academy buildings in themselves are beautiful examples of Mr. Saarinen's work. There are a choice museum of art, a complete art library, dormitories, a club, residences and studios.

Cranbrook Institute of Science in its field plays a similar rôle: to stimulate and complement instruction in the allied schools and to encourage



A glimpse into the dining hall of Cranbrook School for boys. Below, art studio of Brookside School for younger boys and girls.





One of the playing fields, Cranbrook School. Other buildings are the Academy of Art and Christ Church.

original investigation. Founded only five years ago, the institute has been successful in both undertakings.

The institute is closely affiliated with the scientific departments of the University of Michigan. A distinguished group of men, headed by Dr. Robert T. Hatt, director, have built up strong divisions of astronomy, geology, botany, biology and allied subjects. In addition to laboratories for instruction and investigation, notable collections, including many habitat groups, have been assembled. These and "open nights" at the observatory attract large numbers of visitors. Outsiders, too, by becoming members may actively participate in its classes, nature walks and other scientific pursuits. Not only do members of the staff conduct lectures, demonstrations, classes and field trips for the students of the Cranbrook schools, but an im-

pressive list of publications stands to their credit.

Completing the Cranbrook list is the community Christ Church of which Rev. Samuel S. Marquis, D.D., is rector. From the outset no one save the founders themselves has contributed more to the success of Cranbrook than has Doctor Marquis. A wise counsellor who has sat continuously on several of its boards, an inspiring preacher, a spiritual leader of power, his presence has meant much.

Christ Church Cranbrook

The edifice of Christ Church is widely known to be one of the finest Gothic structures in America. Designed by Goodhue and Associates, it is the logical successor, as are the schools, of the Meeting House which is near by.

The sheer beauty of this church,

with its richness of stonework, wood-carving, tapestries and paintings, attracts an ever increasing number of visitors from far and wide. All this, of course, is only incidental to its main function. From the commanding tower a carillon of sixty-two bells rings out over the countryside, freely summoning those who would share the benefits of Christ Church.

If it is true that "it is as necessary to create a proper environment for an art object as it is to create the object itself," then we have the clue to a still wider principle: a well rounded education gained through early and long-continued exposure to the finest values—artistic, scientific and religious. Haphazard distractions are taboo.

If we add the note of joyousness, all these Cranbrook activities constitute what some of us mean by environmental education.

Recent Technologic Changes and Their Significance for Education

By WALTER N. POLAKOV

THERE is a curious belief in the West Indies that a potent drug exists which, administered by the voodoo doctors, stops the activities of the high brain centers and turns the victims to all intent and purposes into automatons who do as they are told and ask no questions. In that way the unscrupulous voodoo doctors get a supply of cheap and docile slaves, called Zombies.

The Brothers Chapek, in their satire "R. U. R." dramatized the robot ideal of the employers of the Machine Age.

To what extent our educational system, embracing schools, Hearst papers, comic strips, radio and movies benumb the higher brain centers and thus manufacture modern Zombie-Robots, is beyond my topic, but, whether the Zombie-Robots have a useful function to perform in modern society is a question of import.

In a society whose existence was sustained by a handicraft and primitive agriculture, skill and manual dexterity played an important part. To fashion a pair of shoes or a barrow required all-round skill; to weave a homespun cloth or to join and carve a piece of furniture required a degree of manual dexterity.

When the handicraft period was supplanted by the manufacturing period, the greatest advantage to entrepreneurs came not from machines but from the subdivision of labor and its organization.

Perhaps the highest development of this stage of productive organization was reached in the days of Adam Smith, who described the mental characteristics of manufacturing workers in these picturesque words: "The understandings of the greater

part of man are necessarily formed by their ordinary environments. The man whose whole life is spent in performing a few simple operations . . . has no occasion to exert his understanding. . . . He generally becomes as stupid and ignorant as it is possible for a human creature to become. . . . The uniformity of his stationary life naturally corrupts the courage of his mind. . . . It corrupts even the

An industrial diagnostician tells the schools that they must prepare the new generation for conditions of life that are being created by science and engineering, and must stop crippling children by fitting them into a past century pattern.

activity of his body and renders him incapable of exerting his strength with vigor and perseverance in any other employment than to which he has been bred."

In that era indeed, Zombies and Robots were nearly approximated in factories and the ideal of an automaton, docile and unquestioning, met the requirements of industry.

The same ideal remained when the Machine Age followed the industrial revolution of the late eighteenth century, displaced manual labor and largely substituted automatic ma-

chines for skillful craftsmen. Again, when heavy and speedy machines have overtaxed the muscular strength of workmen and brought into being steam engines and water wheels, the old requirements continued for the docile Robots. Even machine attendants were referred to as "machine hands" and "factory hands." Their skill, their thinking facilities were not in demand. What was needed up to the first quarter of the twentieth century was the endurance to stand the monotonous repetitive performance of simple operations.

Nobody has better described this requisite than the pioneer in so-called scientific management, Dr. F. W. Taylor, when he recounted his conversation with a typical steel mill worker of those days, Schmidt of the Bethlehem Steel Corporation. Taylor said to him:

"If you are a high priced man, you will do exactly as this man tells you tomorrow from morning till night. When he tells you to pick up a pig and walk, you pick it up and you walk, and when he tells you to sit down and rest, you sit down. You do that right straight through the day. And what's more, no back talk. *Now, a high priced man does just what he's told to do and no back talk.*"

The premium was placed on the complete submission of a man to the performance of a task prescribed in minutest details and "No back talk."

And so the Zombies, Robots and "machine hands" have for ages represented the ideal which the industrial enterprisers held for a slave or a wage worker, and schools met the demand.

But then something happened. Volta, Franklin, Faraday, Delivo Dobrovolski, Westinghouse, Steinmetz et al., experimented with electricity. At last, Robert Thurston, in his presidential address before the American Society of Mechanical Engineers in 1881 came with a bold prophesy: "The distribution of power by electricity is not unlikely to prove a more important application of this wonderful force than the electric light. . . . The dynamo-electrical engineer has nearly solved this problem."

This really happened soon afterward. In 1887, 175 million KWH's were sold by the central stations. By 1929 the central station output reached the peak of 97 and a third billion KWH's.

What this tremendous supply of power, augmented by about an equal quantity generated in the industrial plants, has done to change our productive methods; to revolutionize our means of communication and transportation, sanitation, health standards and longevity; to transform the entire mode of our living, of work and of leisure, of entertainment, of family life, of economic environment, will take volumes to describe.

Is Farming Rich Man's Game?

Consider any phase of our socioeconomic life of today with that of our parents. Farming was done with animal power; manure was the chief fertilizer; local markets were in close proximity, church festivals and barn dances were our only recreation; county lines were within one day's buggy ride; illumination was by coal-oil lamps and dip tallow candlewicks; R.F.D. was just advocated by Senator Butler of North Carolina; the majority of the population still lived on the farms and, if cramped or forced to move by the rapacious destruction of soil and forest, had land for the asking out West. Today farming is a rich man's game.¹

Technologic changes in agriculture

¹Sixty-three per cent of farmers in 1929 earned less than \$1,000 a year whereas only 34 per cent of nonfarmers earned that little. As the Brookings Institution asserts, "Nineteen million families, or 90 per cent, were not in a position (in 1929) to enjoy a liberal diet."

leave less and less room and a more and more unenviable position for the masses who are unprepared to take advantage of technologic large-scale farming. An individual farm becomes a poor subsistence homestead.

In industry, likewise, a craftsman, or even a small manufacturing concern, cannot take full advantage of all the technologic improvements that are available to a corporation with ample financial resources. We have heard much about "chiseling" from General Johnson. A small concern of the nineteenth century pattern, in its struggle to survive, resorted not to science and technique, but to wage cutting, long hours and all sorts of tricks. To be economically weak became tantamount to being technologically backward. Technological backwardness in this Power Age means being left out of the running.

Our "Silent Servants"

The industry of today and of tomorrow, unlike that of yesteryears, has at its disposal a vast army of invisible robots—KWH—which do the mechanical work. To do this work with man's muscle-power, instead of electric power, would require some 10,000,000,000 able-bodied men. This displacement of muscular power by electric power occurred so rapidly—within a few decades—that we hardly had time enough to adjust ourselves mentally to the change and we still continue to cling to traditions, habits and patterns of reasoning that we inherited from the environment of which nothing but memory remains.

Likewise our everyday environment has changed fundamentally. Chores of domestic work are being performed by "silent servants"—electric vacuum cleaners, washing machines, grills and percolators. Huge quantities of food reach families in a precooked form, in cans; electric refrigerators preserve leftovers; fans, air conditioning and automatic furnaces augment the comfort of those who can afford them. But what do any of the users know of amperes and cycles and laws of electricity that they use so liberally?

Entertainment is provided by radio waves and cinemas while audiences sit in blissful ignorance of the electronics, optics and chemistry that serve them.

We travel in streamlined trains and cars or even fly, knowing nothing about six-dimensional kinetics of gases, ballistics, laws of gravitation, dynamics or higher mathematics, which are at the base of modern transportation.

We measure distances in hours rather than in miles; we disregard seasons of the year by having strawberries and mushrooms in the dead of winter and ice on the hottest days of summer, all without the slightest notion of the laws of thermodynamics. We even sneer at the "highfalutin" theory of relativity.

We dream of television, of the full conquest of disease and even of abolishing death, and yet most of us have not even heard of subatomic phenomena, colloidal chemistry and biochemistry.

In short, as Frederick Soddy said: "The age in which we live is scientific. Its problems call for fearless and original scientific thought if it is to survive and triumph. It has been left too long in peril of shipwreck at the mercy of medieval and obsolete ideas."

J. B. S. Haldane is no less emphatic: "We have got to learn to think scientifically, not only about inanimate things but about ourselves and one another."

Three Modern Essentials

This is a large order. Beset with a ruthless struggle for existence, the majority of the people cannot even begin to take the time to study the things they ought to know. Yet life contacts and daily toil itself force upon the masses a new adjustment, a new psychologic orientation which is as essential for the acquisition of scientific attitude as for self-preservation.

Consider yourself behind the steering wheel of an auto. As you wind your way through the city streets you cannot afford a lapse of attention.

You watch the traffic, you watch the green and red lights, you listen to the policeman's whistle; you watch your gasoline gauge, ammeter, oil pressure and the temperature of the radiator. In short you exercise *sustained attention*.

That is not enough. You must be sure that you understand and correctly interpret the signals and the instrument readings, for otherwise it is of no avail. In other words, you must have a *correct perception*.

Nor is that the end, but merely a prerequisite of safe driving. You must be on the alert to move your foot from the accelerator to brake pedal when a child jumps in front of you or a light signal suddenly changes. Stated differently, you must exercise a *quick reaction*.

The Man of Tomorrow

Now these three fundamental qualifications are essential not only for operating a car but any machine, especially a power-driven mechanism, and in a no lesser degree to conduct a laboratory experiment or to manage any business or to administer any public affair.

A man in a "one-hoss shay" did not have to have these qualities. He could drive dozing; horse sense took care of him. A man in the mill did not have a formidable array of dials and instruments to watch and to interpret their indications. In the slow tempo of the bygone Machine Age, promptness of reactions was not essential, for no accident, death or breakdown would follow instantaneously. Man had time to act.

Is there room in this new World, in this Power Age for a Zombie without the higher cerebro-nervous centers? Is there room for a Schmidt who does what he is told and does not talk back?

Modern industry, modern transportation, the whole modern life no longer has room for that type of a once desirable employee. The man of today, and more so of tomorrow, must excel in sustained attention, correct perception and prompt reaction. Without these his place is

either in the graveyard or in an institution.

Of course the new type of Robots are still needed and are being used in larger and larger numbers. But these Robots need not and cannot be human. No human being can feel or see a difference of 1/10,000-inch in thickness. No human being can see a signal and push a button within 1/100,000th of a second. No human eye can see across the ocean and project the image to others. No human being can correct the deviations of a magnetic needle or discern a minute cavity inside of a steel ingot. Our electric robots do these things daily, all around us.

What has really happened is this: Physical labor has been largely substituted by electric power and trade skill has been excelled by electric measuring and controlling devices. Electrified, automatic machines of today can do nearly everything but think. These functions of thinking, observing, reasoning and correcting become the duty of men behind the machines.

The industrial worker of yesterday can no longer fill the bill unless he has developed these new characteristics of attentiveness, intelligence and alertness. It is no longer the great multitude of Zombies that are wanted. Our national productive life depends upon a small number of men and women of a superior type. What type of men do you think are needed in modern plants, such as the Youngstown Sheet Tube Company? Listen to this report by Felix Bruner in a recent newspaper article:

Technologic Unemployment

"In Youngstown the conversation among steel makers and workers is of the great new continuous sheet mill of the Youngstown Sheet Tube Company. In this mill production is almost automatic. It produces sheets from which automobile bodies are made. One can walk nearly the whole length of the great mill and see only eight or ten men. Hundreds were required under the old process. There is talk now of producing by

the nearly automatic process sheets so wide that nearly a whole automobile body may be punched from them. Technologic unemployment is very real to the steel workers."

Such accounts can be had from nearly all inquiries. Of course, there are backward industries, lagging behind the procession, but their days are numbered. The trend is unmistakable.

This transition period is harrassed by many contradictions, misunderstandings and opposing actions. To many, like to the well known educator, L. P. Jacks, it appears that:

"Our present civilization has developed evils on a scale so vast and of malignity so frightful that a selected list of them would read like a catalogue of hell's masterpieces."

Past Century Patterns

But the paradox of poverty amid potential plenty presented by our conflict between scientific production and unsocial distribution appears to an engineer not as a puzzle as to how to outwit the devil's tricks, but as an orderly task in scientific analysis and a balance. If we build automobiles for a speed of 80 miles per hour and run them on the roads built for a speed of 50 miles per hour, furnish them with headlights that are adequate for a 35 mile per hour speed and entrust their operation to those drivers whose perception and reaction are geared to the mule-team's speed, we are bound to have smash-ups.

Says L. Urwick, director of the International Management Institute, Geneva: "Today the nations of Christendom are machine peoples. But in many of their customs and methods of thought they seek to maintain the social structure and the culture evolved under an earlier and different technique. This, fundamentally, is the cause of the maladjustments in their economic order. They are maladjustments which can be cured by one method and one method only, exactly as any other form of disease can be cured, the gradual winning of clearer knowledge by the process of science."

This is a definite challenge to the whole system of education. And this challenge carries us one step farther.

If the modern technologic development can no longer depend on human automatons like Schmidt who does exactly what he is told to do and "no back talk"; if modern production methods and our whole life are so geared that we need men with sustained attention, the school has to meet this requirement. Its graduates must not be Zombies of witch-doctors or such manufacturing workers as described by Adam Smith, but wide awake, alert and intelligent human beings; men and women who are capable of doing what their intelligent interpretation of instrument indications prompts them to do and who are eager and capable of asking intelligent questions.

The room for skilled artisans is rapidly disappearing. The demand for all-round intelligent men in industry and service occupation is widening daily. The fist blows exchanged at the close of the last convention of the A. F. of L. between the leader of the trade union and the leader of the industrial union are picturesquely symbolic.

When St. Nicholas smote the face of a heretic, the latter remarked: "It is an unconvincing way of conversion." But when our civilization threatens to go smash it is high time to revise our educational doctrines and practices in order to prepare the rising generation for the conditions of life that are being created by science and engineering, and to stop crippling our children by trying to make them fit into the past century pattern.

of pupils and the selection of books and apparatus for the carrying on of such instruction, the board being asked to approve only when new types of instruction are to be added to the school system, new expenditures are involved or new contracts need to be signed. In no case shall the board take any action on such matters except on the prior recommendation of the superintendent.

5. The initiative in all matters relating to the appointment, assignment, transfer, promotion, suspension or dismissal of teachers, principals or special supervisors shall rest absolutely with the superintendent of schools and all persons presenting individual cases for consideration shall be referred to the superintendent of schools for a hearing by members of the board. The superintendent shall report his recommendations to the board which shall have power to approve or disapprove of the recommendations which he makes, but no power whatever of substituting other names or initiating new appointments.

6. In the appointment, assignment, transfer or dismissal of janitors, the superintendent, acting in conjunction with the head of the building department, shall have similar authority.

7. The heads of other departments of the school system such as building, repair and supplies, and especially business management shall have similar right of appointment, transfer or dismissal of subordinates subject to the final approval of the superintendent of schools.

8. In the matter of reports to be required, records to be kept, forms to be used and similar matters, the power of initiative should in general rest with the superintendent or the heads of departments acting under his direction, but the board shall have power to request additional information as to the work of the schools and to ask that there be submitted to it any form of information which will enable it better to check up the work of its executive officers, or inform itself better as to the conduct of the schools.

Suggested Rules for Boards of Education

By W. W. KEMP

ASSUMING that a city board of education proposes to conduct the school administration in accordance with well established principles, the following fundamental administrative rules ought to be adopted by it as a platform upon which it proposes to deal with the superintendent it has elected:

1. The board of education shall be primarily a legislative body, and the superintendent of schools shall be its recognized executive officer. The board may institute inquiries, receive reports and legislate, but the execution of all policies decided upon shall be left to the superintendent of schools and such other executive officers and subordinates under his general control as he may designate.

2. In the organization of the school department the superintendent of schools shall be the chief executive officer with executive oversight over all other departments of the school system. While heads of departments

shall be left large liberty of action within the limits of their departments, the superintendent of schools shall nevertheless be held responsible for proper coordination of effort and satisfactory results. In the educational department he shall be in supreme control. As the chief executive all departments shall report through him to the board of education.

3. As the chief executive officer the superintendent of schools shall have the right to attend any meeting of the board of education or any regular or special committee thereof, except when his own tenure or salary is under consideration, and with the right to speak on any question but without the right to vote.

4. In all matters relating to the conduct of instruction the superintendent of schools shall be in complete control. He shall have full charge of the making and changing of courses of study, the supervision of instruction, the promotion and assignment

Class Size Does Make a Difference

By H. LEIGH BAKER

CLASS size makes a significant difference in the effectiveness of the high school teacher, particularly in her knowledge and understanding of her pupils.

This conclusion is one of the outcomes of a study of twenty-seven high school teachers in their knowledge of 250 of their pupils, selected to be representative of the teachers' knowledge of all of their pupils. The teachers and pupils, representative of the various subject departments, were in five different high schools of the comprehensive type, ranging in size from an enrollment of 255 to 5,400.¹

The influence of class size upon teaching and learning has intrigued school administrators and research investigators for the last forty years. Practical school people have been interested, particularly during periods of increased demand for education and limited or decreased revenue, largely for financial reasons. The fact that approximately 75 per cent of the total operating cost of public schools in the United States is for teachers' salaries indicates the significant relation that exists between class size and educational costs. Research investigators have sought to discover and measure the conditions affecting teaching and learning that those conditions may be better controlled.

Irwin,² in an excellent summary of the literature, states that 205 books, monographs and articles were devoted to the problem of class size during the period of 1900-1932. There were 108 studies of an experimental nature. Examination of copies of educational journals of the last two years

How well does the high school teacher know her pupils as individual human beings? Do teachers know more about their individual pupils in small classes than in large classes? This article presents an answer to these two questions

is ample evidence that the problem of class size has not yet been solved and that interest has not waned.

The two principal conclusions contributed by research are: (1) classes are growing larger and (2) pupils' scores on standardized tests are about the same whether they are in small classes or large ones. Research on class size has been narrow in its scope and should therefore be narrow in its conclusions. The present article reports an attempt to attack the problem of class size from a new angle.

"Teach children, not books." Such a principle has been quoted to teachers by many a school administrator, and by professors of teacher training to many prospective candidates for the classrooms. Education is no longer considered modern without acceptance of such a principle. But have we stopped to think through to the implications of the acceptance of the principle? We expect the teacher to know the particular, individual children in her classroom.

Since previous studies seem to agree that measurement of factual learning is not affected by class size and since students of the problem indicate the need of a new angle of attack, an investigation was made during the 1933-1934 school year in the light of such conclusions.

The study reported here was made in five Connecticut high schools. Twenty-seven teachers and 250 pupils participated. The teachers were representative of the various subject departments: English, social science, science, mathematics, foreign language, home economics, practical arts and art. The pupils were a representative sampling from the classes of each of the teachers selected according to accepted methods of scientific sampling.

To discover what specific individual differences were considered of importance in educational activities, an analysis was made of the content of a sampling of twenty-three books in the field of educational psychology which were published during the years 1927-1932. The rather extensive list of individual differences which resulted was classified into eight groups; general ability to learn, special abilities, physical status and health, present educational status, interests and hobbies, personality and adjustment.

A comprehensive question blank was prepared to test the teacher's knowledge of her pupils in each of the eight major groups of specific individual differences. Standardized tests and question blanks were the basis for collecting a large part of the information and for measuring the

¹ This report is based upon data gathered for use in a dissertation submitted to the graduate faculty of Yale University.

² Irwin, M. E., *Educators Have Not Solved the Class Size Problem*, *The Nation's Schools*, 10:23-36, December, 1932.

TABLE I—TEACHERS' KNOWLEDGE OF PUPILS IN LARGE AND SMALL CLASSES

Factor Studied	Mean	Standard Error of Mean
Teachers' knowledge of pupils in small classes (less than 25)	26.16	1.26
Teachers' knowledge of pupils in large classes (more than 35)	21.90	1.50
Difference in favor of small classes	4.26	1.96

teacher's knowledge against the information gathered.

The Terman group intelligence test was used as a measure of general mental ability, the Sims test of socioeconomic status for home background, the Symonds adjustment inventory in its field, and from the Bernreuter personality inventory fifty items most closely related to school life were selected. Question blanks were devised by the investigator for use in the other fields.

The twenty-seven teachers were then tested in their knowledge of the pupils by the use of the question blanks. The teacher was asked to fill in the blanks exactly as she thought the pupil would fill them in. The approach to the teacher was indirect in order to avoid the possibility of a teacher preparing herself in knowledge of the pupils sampled in the study. The teachers understood that the study was an effort "to discover the variety and extent of individual differences of pupils, as they had impressed the teacher," rather than the measurement of their knowledge of their pupils.

Information was gathered from the pupils on the same question blanks as had been filled in by the teachers, except in the case of physical status and health when the records of the school nurse were used. Also, in the case of general ability to learn in which the teachers were asked to place each pupil in one of a five group classification, the measure of the pupil's ability was determined by the performance in the Terman test.

The findings of the study indicate that high school teachers know about 23 per cent of the facts about their pupils which educators and educational psychologists think are of importance to the teacher. The twenty-

seven teachers had accurate knowledge of 11,296 of the 49,241 facts which were gathered about the 250 pupils. The mean teacher per cent score was 23.3; probable error of the mean, ± 1.02 . The standard deviation from the mean was 7.88 ± 1.07 .

The foregoing knowledge scores are for all of the teachers and all of the pupils irrespective of the size of the class. The results were then analyzed in order to find the possible effect of size of class upon the teachers' knowledge of their pupils. Classes with an enrollment under twenty-five were considered small; those with an enrollment over thirty-five were considered large.

The teacher knowledge scores for all pupils in classes under twenty-five were thrown into one group; the scores for all pupils in classes over thirty-five were thrown into another distribution. The mean knowledge scores of the twenty-seven teachers for the pupils in each of the two distributions, *i.e.* small and large classes, when determined and compared were found to be 26.16 per cent for the fifty-nine pupils in the small classes, and 21.9 per cent for the

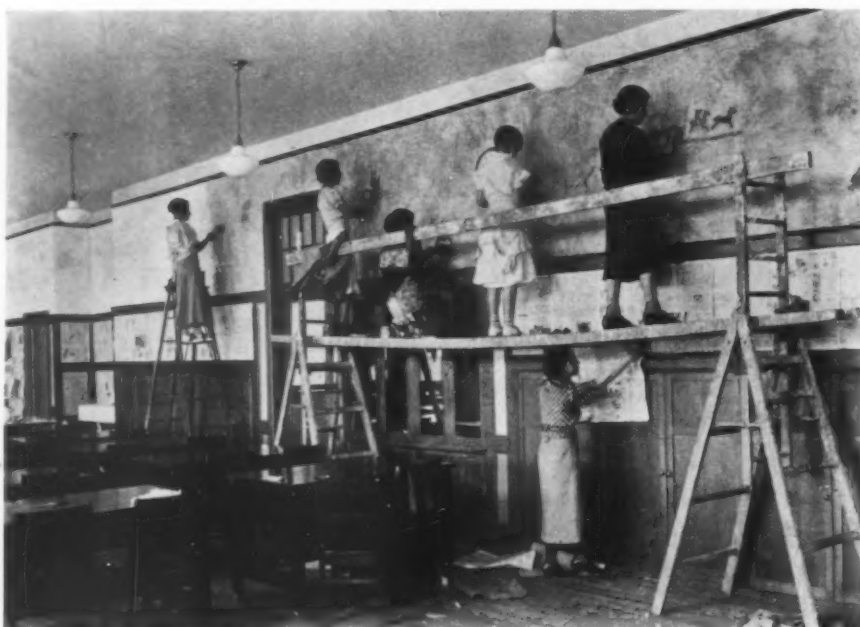
fifty-one pupils in the large classes. The difference is, therefore, 4.26 per cent in favor of teachers' knowledge of pupils in small classes, in comparison with an average knowledge score for all classes of 23.3 per cent.

The reliability of this difference in terms of the ratio of the difference to the standard error of the difference is 4.26 to 1.96, which is 2.17. Consequently, the chances are 99 in 100 that there is a significant difference in favor of teachers' knowledge of pupils in small classes, in comparison with large.³

The increase of nearly 20 per cent in teachers' knowledge of pupils in small classes in comparison with pupils in large classes might or might not be larger in a study planned to investigate this specific question. But it is statistically significant. Even if it were not larger, no doubt there are facts represented by the 20 per cent increase which are crucial in the teacher's understanding of the pupil and the pupil's adjustment in school and other life situations.

³ Garrett, Henry E., *Statistics in Psychology and Education*, New York: Longmans, Green and Company, 1926, p. 134.

Transportation Project Enlivens School Walls



The art room at Glenfield School, Montclair, N. J., is a place of live interest to the whole school, for pupils have worked out a history of transportation.

The 1937 Yearbook

Department of Superintendence at Work

By FRANK G. PICKELL

THE 1937 Yearbook Commission of the Department of Superintendence of the National Education Association has selected tentatively as the topic for the yearbook, "The Improvement of Education for American Democracy"—a program of educational interpretation. The commission held its first full meeting at Skytop, Pa., Nov. 16 to 18, 1935, and, in the main, developed the outline under which the general subject is to be presented.

The Yearbook will be developed under three general headings. The first is "What Do Americans Want and What Do They Have?" Under this division of the book an honest attempt will be made to show the difference between what Americans normally need and want for a good life and what they actually have or are experiencing.

For example, an American wants a square deal. He wants an opportunity to earn a living at an adequate wage. He wants security and dignity in old age and a decent standard of living. He wants peace, health, recreation and honesty through the normal sources of information such as the press, the radio, motion pictures. He wants honesty in politics and in the courts.

Every honest, good citizen seeks for facts and prays that he may find out the truth. He operates on a high plane, for he believes that "without vision the people perish." He wants a good home life under surroundings that are conducive to the proper rearing of children.

But, above all things, he wants and requests an education through every agency—press, motion pictures, ra-

dio, schools, adult education—that guarantees these things.

The mainspring of education, its inspiration, its reason for existence, is to promote the public welfare. What Americans want more than anything else is, through education and other orderly processes, to find the way by which they may bridge the gap between what they have and what they want.

The second general heading of the Yearbook will be, "Why Are Americans Failing to Get What They Want?" Under this heading it is proposed to present an honest analysis of the deficiencies in our social, political and economic organizations.

The third general heading under the book will be, "What Must the American People Do to Have What They Want?" What the American people want in the light of their fundamental ideals and traditions is clear. What they have is clear. The difference is little short of a chasm, a chasm which, in the interest of our whole nation, must be bridged.

This chasm can be bridged either by orderly or by violent processes.

1. What do Americans want and what do they have?

2. Why are Americans failing to get what they want?

3. What must the American people do to have what they want?

The Yearbook that will answer these questions should be well worth a wide circulation.

It is to everybody's interest that the bridging of the chasm shall be done in an orderly manner. The first and the foremost guarantee that the chasm shall be bridged in an orderly manner is proper and adequate education. It is on this bridge of education in the light of our democratic tradition that we have thus far made orderly progress. Across the same bridge lies the road to the fuller realization of the American dream.

The members of the commission are: Frank G. Pickell, chairman, superintendent of schools, Montclair, N. J.; Frederick H. Bair, superintendent of schools, Shaker Heights, Ohio; Charles A. Bowers, secretary, Nebraska State Teachers Association; Hollis L. Caswell, professor of education, George Peabody College; Willard S. Elsbree, associate professor of education, Teachers College, Columbia University; John Guy Fowlkes, professor of education, University of Wisconsin; Clyde R. Miller, director, Bureau of Educational Service, Teachers College; Arthur B. Moehlman, professor of administration and supervision, University of Michigan; J. A. True, superintendent of schools, Council Bluffs, Iowa; H. Claude Hardy, superintendent of schools, White Plains, N. Y., and Harry Elmer Barnes, author and editor, Auburn, N. Y.

The commission plans to issue the Yearbook in such form that it may be used in every high school of the United States, in teacher training institutions, and in colleges and universities in connection with their social studies curriculums and will strongly recommend that such use of the Yearbook be made. The commission also hopes and will recommend that the Yearbook be used by civic and social groups, such as chambers of commerce, women's clubs, service clubs and other similar types of organizations.

In the meanwhile, the commission is anxious and desirous of receiving suggestions from superintendents of schools and other interested persons for the possible improvement of the proposed yearbook.

Rockford's Broad Program of Health Education

By RUTH E. LINS

ROCKFORD, Ill., an industrial city with a population of approximately 86,000, has in its educational system twenty elementary schools, two junior high schools and one senior high school. Six of these buildings are provided with gymnasiums and thirteen with playrooms. For safety, all nonfireproof buildings are equipped with fire escapes. The elementary school enrollment is 7,500.

The two junior high schools, both modern buildings, have double gymnasiums and swimming pools. The total enrollment in both schools is 3,680. The senior high school is a plant composed of four buildings erected at different times and later attached to one another. It is provided with a swimming pool and two gymnasiums, one for boys and one for girls. Twenty-eight hundred pupils attend the high school, which origi-

nally was planned to accommodate 1,800. As a consequence, it is necessary to rent an auxiliary gymnasium located near the school for overflow classes in physical education for boys.

Eleven of the elementary schools are organized on the duplicate school plan, in which the child spends one-half of his time in the home room and the remainder of the school day in the gymnasium, auditorium, art, library and music rooms. In all the other schools all subjects are taught by classroom teachers. The junior and senior high schools are organized for administrative and social purposes on the home room plan, with a departmentalized plan of instruction in operation.

The curriculum of the Rockford schools is classified under six divisions, including health and physical education, exact science, social studies, fine arts and vocational studies.



Every child gets frequent health inspection by school nurses.



Last year the school dentist examined the teeth of 9,201 children.

We think of education as a total experience which cannot be separated, for example, into reading, geography, arithmetic, history, health education and physical education. We think of the child as a total individual and whenever we attempt to justify reading, geography, arithmetic, history, health education and physical education we consider just what each has to contribute to the physical, mental and social growth and development of the child, viewed as a total individual, during the important years of his life.

We believe our program of health and physical education to be a necessary part of the complete education of the child. In accordance with this belief, we consider that the purpose of the department of health and physical education shall be to provide a program of activities that will contribute to the child's physical, mental, and social development and educate him for an intelligent and pleasurable use of leisure time.

The school health program includes for distinct divisions: (1) school buildings and grounds, (2) health service, (3) health instruction and (4) physical education.

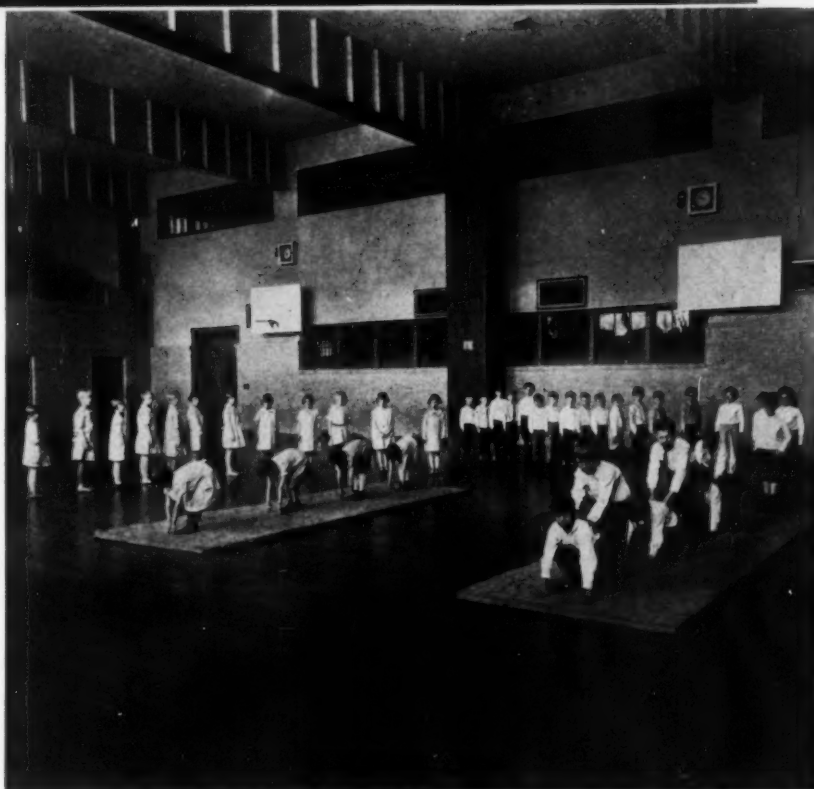
A hygienic environment is necessary for the protection of the child's



health. It is also an important factor in the child's education. Rockford realizes its obligation to provide modern, sanitary buildings and equipment for the benefit of the child while he is in school. One of the recent Rockford relief projects tending in this direction was to carry out an extensive program of cleaning and decorating buildings and resurfacing playgrounds at the various schools.

There are many factors in the environment of the school child that are extremely important from the point of view of health—sanitary drinking fountains, modern toilet facilities, proper ventilation and heating, buildings that are clean and safe, adequate washing facilities with an ample supply of soap and paper towels, proper lighting and liberal playground space.

The various phases of the health service are directed by a school physician, a school dentist and a psychiatrist, with the assistance of a staff of five nurses, two in the elementary



In the grades play activities include games ranging from simple tag to organized team games such as soccer and playground baseball. In the gymnasium come rhythmic activities, folk dancing and self-testing activities.

schools and one in each of the junior and senior high schools.

Health service includes, first, the medical inspection of every child in the first, third and sixth grades in the elementary schools and in all the opportunity rooms. This consists of an examination of the heart, lungs and throat by the school physician. In addition, children with marked defects of the heart, eyes and hearing, as well as the orthopedic pupils are examined. In the junior and senior high schools, examinations are given to all members of the physical education and swimming classes.

Purposes of Physical Exam

The physical examination has a double purpose: to educate the parent and child in regard to the child's health needs, and to emphasize the importance of the periodic physical examination in its bearing on health. During the year 1933-1934, a total of 8,206 physical examinations were made. All defects found as a result of physical examinations are recorded. The parents of the children who are found to have defects which need the attention of the family physician are informed of the findings.

The school physician assists also in the control of communicable diseases and makes calls to the schools when requested to do so by the principal. Calls to the schools totaled 356 in 1933-1934.

During the last year the teeth of 9,201 children were examined by the school dentist. Of that number, 21 per cent had teeth in good condition. Parents are informed of the results of the dental examination and advised that children needing care see a dentist at once. A recheck made last year in two schools revealed the fact that 15 per cent of the children in one school and 25 per cent in the other had seen a dentist within six weeks of the first examination. A weekly clinic is maintained in the administration building of the board of education for children whose parents are unable to pay for needed dental service.

The work of the school nurses is

recognized as a necessary part of the health service to children. The nurses assist the school physician with physical examinations, and the dentist with dental examinations. The elementary school nurses assist at the dental clinics. In addition, they inform parents and teachers of the defects found on examination, make visits to the home, give health inspections, examine children who return to school following a contagious disease, assist the teachers in weighing and measuring and test the vision of the children. During the last school year a test of the vision of 3,497 children in the elementary schools revealed that 10 per cent had defective vision. Fifty-five per cent of those children are now wearing glasses.

Adequate facilities are provided for first aid treatment in the schools. Each building is equipped with a complete first aid kit. Classroom and physical education teachers in the elementary schools and the nurse in each of the junior and senior high schools give first aid treatment when needed. Courses in home nursing are taught in the junior and senior high schools by the regular school nurses.

Other Special Health Services

A fresh air room is provided in one of the elementary school buildings for all children who are abnormally below weight, anemic, tuberculosis suspects or otherwise physically deficient. An average of fourteen children have been in this class during the last year. The class follows a certain routine which includes lunches in the morning and afternoon and rest periods.

Included under the division of health service to children is the work of the psychiatrist employed by the board of education. His duty is to aid in the proper placement of children who are not making normal progress in their grades.

In addition to the provision made for a healthful school environment and for medical and dental service, a definite program of health instruction is carried out in the elementary

grades and in the junior and senior high schools.

The emphasis in health instruction in the lower grades is placed almost entirely on habit formation. This is done in an effort to stimulate in the child the desire to want to be healthy through the consistent practice of the health information which he has learned, and to cause him to realize the importance of having his physical defects corrected.

Health teaching in the first six grades is centered around the following units:

1. Cleanliness
2. Care of teeth
3. Care of eyes
4. Control of communicable diseases
5. Foods
6. Exercise
7. Fresh air and sunshine
8. Sleep and rest
9. Safety
10. Mental hygiene
11. Harmful effects of alcohol, tobacco and drugs

In the first three grades the classroom teacher correlates health teaching with larger units of work, such as projects in building a home or grocery store or a unit in the development of travel and transportation. In the upper grades, health instruction is given in definite periods during the school year. These periods serve not only for the presentation of additional facts, but also as a means for emphasizing further the importance of habit formation in its bearing on health. In the junior and senior high schools health instruction is given in connection with the general science courses.

Beginning with the fourth, fifth and sixth grades, textbooks are used to meet the child's growing demand for the reasons which underlie health teaching and the facts upon which health habits should be based. Free textbooks are furnished by the board of education for all school children.

Despite all the provisions which are made to offer a broad program of health education in the schools, it should be remembered that health

training belongs primarily in the home. The school plan is designed to supplement home training. In co-operation with the home an attempt is made to achieve the chief objective of health education, namely, healthy boys and girls.

The final phase of the school health plan is physical education, which involves daily exercise and activities necessary for the proper growth and development of the child. Physical education makes its contribution to health through an organized program of activities suitable to the age, interests and needs of the child. Most children have a natural desire to excel in physical skills. This desire is utilized in many ways in connection with health education to stimulate the development of health habits.

Exciting races, interesting games of many types and varieties, tumbling, gymnastics, stunts, picturesque folk dances and singing games from many countries, laughter, thrilling competition, mental and physical exhilaration, these things are all part of the work in physical education in the Rockford public schools.

Program in the Grades

The activities of the physical education program in the first six grades are grouped under three main divisions: (1) play activities, (2) rhythmic activities and (3) self-testing activities.

Play activities include games ranging from simple tag games to organized team games such as soccer and playground baseball. Certain skills of the more highly organized games are taught in some form suitable to the age level in the elementary schools.

Basketball, for example, is omitted from the elementary school program since it is too strenuous for the physical capacity of the average fifth and sixth grade child. However, many of the techniques of basketball, including handling the ball skillfully, passing, guarding, shooting for the basket and team play are taught in the simpler games of the basketball type, such as nine court basketball.

Similar skills involved in other team games such as soccer and baseball are also taught in simple and progressive form.

Rhythmic activities include the interpretation of various types of rhythm by such movements as walking, running and skipping; singing games which enable the child to express himself by acting out stories with which he is familiar, and folk dances of many nations. An effort is made to correlate folk dancing with geography and history, and the work of the music department. American country dances, for example, are taught in the fourth grade where Colonial history is first introduced in the curriculum. The words and melodies of the singing games are taught in advance as a part of the class work in music.

Self-Testing Activities

Self-testing activities are activities by means of which the child may test his own ability and measure his own progress. In this category are included many of the group games such as tag. Baseball throwing tests for distance, tumbling, gymnastics and stunts, all especially helpful in developing skill in body control, are valuable parts of the program of self-testing activities.

Through these activities the child develops a strong body. He derives pleasure and exhilaration from his play, he learns to handle his body skillfully, he acquires grace and poise, he learns to play congenially with other children, the last a fundamental social lesson that forms an important basis for his conduct as a member of adult society in later years.

Through his physical education experience and training the child has acquired a knowledge of physical skills which will be to him a constant source of pleasant and profitable recreation in an age when leisure time is increasing and means of utilizing leisure time intelligently are in greater demand than ever before.

With the background of experience provided by the first six years of physical education work the child

progresses into the junior and senior high schools. The physical education program in the upper levels is fundamentally the same in general content and in the philosophy upon which it is based, but new and more advanced elements are added to meet different age interests and needs.

In the junior high school all boys and girls are required to take physical education for three years unless excused by a physician because of physical disability. The work at this level includes posture work, the correction of defects, more advanced group and team games, swimming, apparatus work and rhythmic activities. In both the junior and senior high schools the American Red Cross life saving tests are given annually. Entirely aside from the values provided by these tests in their bearing on safety education, they present important contributions to the program of self-testing activities.

In the senior high school all pupils are required to take physical education for two years in order to complete the requirements for graduation. The program is a continuation of that in the junior high school with the addition, again, of more advanced games and activities. Special attention is given to the techniques of highly organized sports. Particular emphasis is placed upon intramural athletic competition in both the junior and senior high schools, where extensive plans of intramural competition are in operation for both boys and girls in all major sport activities.

Reaching the Public

In order to increase its effectiveness, the department of health and physical education recognizes the importance of supplying information to the public concerning the nature and scope of the work which is being done in the schools. This information is presented in various ways — over the radio, through talks to parent-teacher associations and civic organizations, through mass demonstrations in the high school stadium, through National Education Week projects and through newspaper publicity.

Troublesome Situation in California

By DEWEY ANDERSON and ELLIS G. RHODE

SHOULD California's high professional standards and salaries magnetically draw to its training centers capable teachers who desire to become high school administrators? Is California the Mecca toward which highly trained, talented high school administrators should wend their way during the next few years?

Decisions based on these questions are being made daily, decisions not only of importance to those making them, but also of vital consequence to the educational profession in California and the nation. For, if made affirmatively, the already overloaded supply of high school administrators will be augmented to react adversely upon professional standards, ethics and salary levels; if made negatively, the universities' professional training departments will suffer greatly because of losses in enrollments, which will tend to retard in these centers the development of educational theory and scientific practice.

A troublesome situation confronts education. The training to be offered, the recruiting and placement of school personnel, must be conceived in relation to the supply and demand for educational services. The disastrous consequences of a planless development are already engulfing the educational profession. Whether the professional advances of the last thirty years can be maintained is open to question, but they will only be made secure if valiant efforts are expended toward curtailing the supply in the interest of preserving for the commonwealth the highest type of educational administrators.

It is presumed by many that the conditions confronting us now are solely the result of the present depression. This is hardly the case, however, for the figures show that the

oversupply of teachers and administrators has been accumulating for many years in California.

Having nowhere else to go for employment, the jobless educator continues to advance his claim for work in terms of the specialized training and experience that he possesses. Oversupply thwarts his efforts on all sides. Accurate records are not available, but it is probable that California possesses twice as many certificated public school teachers as there are educational positions to be filled. A check of those holding valid secondary school administrative credentials indicates that slightly more than 2,000 are now in force. As there are less than 400 high school principalships in the state, there is an excess of four highly trained and fully certified high school principals in California for every one now employed in our secondary schools.

With the supply on hand so great, what are the universities doing to correct the situation? Surely it is not too much to expect that these institutions which stress the importance of vocational guidance in their professional schools of education would themselves guide their students by making known to them specifically the facts of supply and demand.

Few New Schools Open

During the last ten years the average annual number of changes in high school principalships in California was 60, the minimum 50 and the maximum 73. Slightly less than an average of eight new high schools were opened each year, while one was closed. On the average, then, the de-

mands of our expanding secondary school system would have been met by adding seven new high school principals each year.

Of the total number of yearly high school changes, 42 are occasioned by those who leave the profession and whose places are filled by newly certificated persons, or by those who have not previously held administrative positions in California on the secondary level. This figure constitutes the actual demand that must be supplied primarily by the California universities which recommend for the secondary administrative credential.

What Are Universities Doing?

But what do these higher institutions of training really do? For the calendar year 1931, selected as average for the last ten years, one university in California trained and recommended for certification 65 secondary school administrators, this one institution putting on the market more high school administrators than were needed in the entire state that year. Other universities were also busy, so that the total administrative credentials granted that year were 213 to meet an actual demand of 48.

After half a century of constant struggle, the educational forces in California have succeeded in raising the standard of high school principals to the point where the training requirements, occupational ethics, prestige and salary level combined to denote an emerging profession.

The leadership given by these principals did much to advance California's claims to first place among

where for each high school principal employed there exists four others who are highly trained and fully certified

the nation's schools. The office of principal was dignified and raised to a position of prominence in the community.

Within the profession principals developed an esprit de corps which held its members to ever higher standards of professional and personal conduct. The material conditions of the service had been bettered, the quality of men offering themselves for the principalship raised. All these combined to make for permanency of tenure.

Now, threatened by the chaotic conditions of supply and demand, all this is in danger of being swept aside.

The measures to be adopted have the double purpose of raising professional standards and curtailing the supply of candidates for the secondary administrative credential. The first task is to compile and publish an accurate statement of the labor market, which should appear at least annually. It should be done officially by the state department of education, and copies sent to all training agencies in the United States.

Curtailing Supply of Candidates

In California the right to recommend for certification, which amounts in practice actually to certifying candidates for the administrative credential, has been given to accredited university and college departments of professional education. Obviously, this practice cannot serve to limit supply, for these institutions are also training centers whose dependence upon enrollments tends to make the possibility of administrative certification used as an attractive lure for students. Therefore, the right to cer-

tify, or sole recommendation for certification, must be withdrawn from all training institutions and lodged in a much strengthened certification board in the state department of education.

The purpose of certification is to attest publicly the fitness of the candidate for professional service as a high school administrator. Present requirements cannot attest such fitness. To be granted a credential the applicant must hold a life diploma or certificate to teach in a secondary school within the state, must have had two years of acceptable teaching experience, ten semester hours of required course study in school administration, and five semester hours of elective courses in education in an accredited college or university.

While teacher training and experience are proper requisites for one who has the direction of school affairs, they are not tests of administrative fitness. Likewise, course study in school administration in a university classroom, invaluable though it may be, cannot indicate those students who will be qualified to administer high schools.

The certification board of the state department of education should provide an administrative certificate of junior grade which could be secured by an experienced teacher who had taken a prescribed minimum of administrative courses in a professional school of education. This certificate would permit the holder to act in an administrative capacity below that of high school principal within the organization of the high school.

Upon completion of two years of such experience as a junior grade ad-

ministrator, application could be made to the state board of certification to take examinations for the senior administrative certificate, which would qualify the holder to perform the duties of a high school principal. The examination offered would be in written form and administered similarly to those offered by the state bar and medical boards.

This procedure would ensure the selection not only of those who had had teaching experience in the classroom and academic training in school administration in the university, but more particularly had been apprenticed in the actual administrative situations for which certification of fitness is granted. Not only would the standards of the profession be raised, but the requirements would tend to eliminate from candidacy many of the poorly qualified who now so materially contribute to the oversupply of high school principals.

A Training-in-Service Program

How would the professional departments of education in universities fare under these conditions? Schools of education cannot continue much longer to blind themselves to the facts of oversupply of school administrators. With the increasing complexity of our social system and the expansion of scientific knowledge, the rôle of our professional training centers becomes more important. They must accept that rôle, stressing the quality of their offerings rather than their great numbers.

Furthermore, a training-in-service program should be adopted by the state authorities which would prescribe all-year seminars where high school administrators of either junior or senior grade could attend to improve their professional equipment and the management of their school systems. This might necessitate certain adjustments of time and curriculum within the high schools and universities, but these details would not prove insurmountable.

Music in the Elementary Schools

By IRIS TIMSON



Third graders find the xylophone an aid in ear training.



Photographs, Music Curriculum Center, Cleveland

OUR present economic situation has forced us to analyze critically our public school system. Every dollar spent for public education must show results in the development of the child. All subject matter given to him must be of vital importance.

In their effort to lower the cost of public education, many schools have taken music out of the curriculum. It was called a fad or a frill and discarded as useless. We, the music teachers of tomorrow, must prove that this beauty and expression of the arts are essential to man and bring music back into the schools. Our goal is not to make musicians of our pupils, but to establish high ideals of beauty and emotional values.

Olin Downes has said: "There is a greater need today than there ever was before in the history of our people for a general cultivation of the arts. . . . We must produce a finer



A piano class at Charles Dickens School, Cleveland.



Fourth grade pupils making a note score for the rhythm orchestra, Cleveland schools.

liberal man . . . who will act with intelligence and intuition, or we will die like the civilizations that have preceded us." We must see that the beneficial influence of music is made available both now and in the future.

Some years ago the aim of every music teacher was to make finished musicians of his pupils. If they were not capable of reaching stardom they were discouraged and their musical

education ceased. What of the public school music teacher—where, when, and how was he prepared? Usually "has-beens" who couldn't hold their places in opera or symphony, or "mis-fits" who had been allowed to study music but had never succeeded in appearing in public, these poorly prepared teachers read music badly themselves and insisted that every child should learn to read

notes. Too often the songs learned by note were never sung with the words. The child was not given a chance to see the beauty of the song and singing became a mechanical routine.

However, these teachers were soon replaced by another extreme—those who placed their emphasis upon listening lessons in which they taught musical form and appreciation. They

literally filled their pupils with beauty without giving them a chance to experience it; applied music was considered a waste of time.

In spite of poor teaching, music survived; only the children suffered, not the art itself. Now we are attempting to make school children cultivated amateurs. Teachers are trying to build a music program that will not be a mechanical routine but a program of enjoyment and expression. In the primary grades the pupils are given "listening lessons" vastly different from those of former years; they are asked to listen to the music and then to express the feeling they get from it in words, pictures or actions. The teacher's aim is not to secure perfect rhythm, good drawing or graceful dancing, but to help children react to the emotions in music.

Note reading is begun in the elementary grades, not as an end in itself, but as a means of securing pitch sense, tone relations and mood. Teachers are now less concerned over the technique and sight reading ability of children and more solicitous for their esthetic reactions.

Another interesting phase of elementary school music is creative, or rather recreative, expression. After some experience in pitch and rhythm the child will be able to "recreate" some of his experiences at home or

on the playground for the entertainment of his friends. These attempts in creative expression will not be perfect, but it is surprising how well he will balance his phrases and adapt rhythm and tempo to his subject. The teacher of creative music should be careful not to curb the exuberance and creativeness of the child by calling attention to rhythm, phrasing and cadences; these mechanics are secondary to emotional expression.

As music comes into the life of the child it should be correlated with other school subjects. The most obvious correlation is with the other arts, but the instructor will find ways of relating it to all the other subjects. For example, the folk song provides an interesting way of correlating music and history or music and geography.

Pauline Phillips, State Teachers College, Kearney, Neb., worked out an interesting experiment in the laboratory school of that college in connection with folk songs. The children of the fourth grade were confused by the idea that songs are often changed as they pass from one generation to another, accounting for the differences in the original folk tunes and the tunes as they are now sung. Miss Phillips divided the pupils into groups of four. The children in the first group made a song about a country which they had

studied; then they taught the song to the second group; the second group taught it to the third and so on. The last group to learn the song sang it for the first group.

The results of the experiment showed that, in a four phrase song, the first three phrases had remained the same but the last phrase had been changed as it was passed from one group to another. The pupils enjoyed the novelty of teaching the song, they used the material they had learned in another subject, and they learned about folk songs.

Music in the seventh and eighth grades often becomes a problem for the teacher especially if the books used in the school contain songs above or below the experiences of her children. I worked with Miss Phillips on an American Indian music project chosen by seventh grade pupils.

The first few days were given to a brief review of the American Indian; then each child chose the tribe that he wished to represent. They made notebooks from the material found about the Indians; the written work was corrected in the English class and the note books were decorated in the art class. They studied the instruments used by the Indians and made some of them in their manual arts class. They found a simple Indian melody and orchestrated it for an Indian orchestra which consisted of tom-toms, bells, sticks and rattles. They learned some Indian dances in their gymnasium class. Then they studied about modern Indian music—composers of it and its relation to primitive music. The project correlated with the other subjects and moved rapidly toward a goal.

These are some of the means that we are using in the schools to reach our goal of beauty and self-expression. The most satisfying result of study is performance. Mixed choruses, glee clubs, orchestras and bands are all means of using leisure time and are a satisfying medium of performance. Operettas also provide a medium of performance and correlate with other subjects and activities.



The trombone section rehearses in a public school of Rochester, N. Y.

The Best Employment for American Youth

By M. M. CHAMBERS

THERE are approximately 20,000,000 persons in the United States between the ages of 16 and 25. A recent estimate by the United States Office of Education indicates that 5,000,000 of these persons are not in school, but are unemployed and seeking work. The National Youth Administration has made a higher estimate, believing that 5,500,000 youth are wholly unoccupied.

Early absorption of such numbers in private gainful employment is highly improbable, even if it were assumed to be wholly desirable. The best way to remove young people from the ranks of the unemployed is by extension of the period of full-time school attendance. The staggering number of teen-age American youth who are wholly unoccupied—neither in school nor employed—raises an insistent question regarding the extension and improvement of public education.

Each of the forty-eight states has laws providing for compulsory school attendance between certain ages, but both the lower and upper limits of these ages vary considerably among the different states. It will be recalled that the latest state to adopt such a law—Mississippi—did not do so until 1918.

State Age Requirements Vary

The maximum compulsory school attendance age is now eighteen years in five states, seventeen years in six states, sixteen years in thirty-one states, and less than sixteen years in only six states. In one of these it is fifteen years, and in the remaining five it is fourteen years. Twenty years

ago an eighteen-year maximum age was established by law in only one state; the sixteen-year maximum in nineteen states, and a maximum lower than sixteen years obtained in twenty-two states. In three of these the maximum age was as low as twelve years.

The progress during the last twenty years may be shown by the gradual extension of the total number of years of attendance required. At present the shortest period is six years, found in three states. In 1914 six states had no compulsory attendance laws, and in two states the minimum period was as short as four years. The maximum required period of attendance was ten years, found in only one state. During the intervening twenty years the median period of required attendance has changed from eight years (obtaining in eighteen states) to nine years (obtaining in twenty-two states).¹

Statistics Disclose Disparities

At present the five states that require attendance up to the age of eighteen years have established a standard which means that a pupil making normal progress through the school grades will remain in school until he has completed the eleventh or twelfth grade. On the other hand, the four states which require no attendance beyond the age of fourteen are content with a standard which means that no pupil need attend school beyond the elementary level, or even necessarily complete the work of the elementary grades. The

¹Deffenbaugh, Walter S., and Keesecker, Ward W., *Compulsory School Attendance Laws and Their Administration*, U. S. Office of Education Bulletin, No. 4, 1935.

existence of so wide a disparity in standards among the different states, though perhaps easily enough explained, is difficult to justify.

The actual statistics of school attendance serve to disclose the effectiveness of compulsory education laws, and also exhibit the differences among the states with reference to the actual diffusion of school attendance. Here again the disparities among the states are wide. For example, Ohio, which requires attendance up to eighteen, had, in 1930, 96.6 per cent of children aged fourteen and fifteen in school, and 67.7 per cent of children aged sixteen and seventeen in school; while in Georgia, which requires attendance only up to the age of fourteen, the respective percentages of children of these ages in school were only 73.7 per cent and 43.6 per cent. In 1930 the percentage of six-year-old children actually attending school varied from 26.1 per cent in Texas to 91.2 per cent in Iowa. The percentage of persons aged eighteen to twenty attending school ranged from 14.3 per cent in South Carolina to 33.6 per cent in Washington.

60 Per Cent Attend High School

At present it is estimated that only about 60 per cent of all children of high school age in the country as a whole are actually attending school. In some states, such as Utah and California, it is known that this percentage is much higher, possibly going as high as 90 per cent; while in other states, particularly in the Southeast, it falls very low. In other words, the statistics of school attendance as well as the compulsory education laws show that one small group of states now requires and obtains school attendance virtually through the high school period, while another group requires, in the main, attendance only through the elementary level or even less.

In connection with compulsory school attendance, child labor laws must always be considered. In 1933

only five states fixed the minimum age of employment as high as sixteen years, and all these permitted employment at lower ages outside of school hours. A majority of the states still set the minimum age at fourteen, and nearly all permit exemption below this age for employment outside of school hours. Twelve states permit exemption during school hours. In other words, in twelve states children under fourteen may yet be gainfully employed during school hours.

Nearly all states permit exemption from the compulsory school attendance laws in cases in which it is deemed necessary and desirable that the child should obtain a work permit enabling him to enter lawful employment. Generally these exemptions allow the child to leave school when he is two years younger than the ordinary maximum age of compulsory education, provided he has reached a specified minimum standard of educational attainment. This requirement is never more than completion of the eighth grade, and several states only require completion of the seventh, sixth or fifth grades.

Arkansas is at the bottom of the list, with completion of the fourth grade only required. Florida and Georgia specify only that the pupil must be able to read and write, and a few other states similarly require no more than literacy.

Child Labor Increase in 1935

During the brief period when the codes of fair competition under the National Industrial Recovery Act had the force of coercive law they had the effect of prohibiting the employment of children under sixteen in most of the coded industries, and the impression became widely current that the NRA had abolished child labor in America. This impression was never wholly correct, because many children of tender years continued to work in domestic service and in the street trades wholly unaffected by the codes. Since the coercive features of the codes were invalidated by the Schechter decision, the code provisions against child

labor depend wholly for their enforcement upon the mere voluntary cooperation of employers, which experience has shown to be a frail reed.

The 1935 annual report of the National Child Labor Committee sounds a warning to the effect that child labor conditions are rapidly reverting to a situation as bad as existed before 1933. For example, in New York City 1,428 permits for full-time work were granted to fourteen and fifteen-year-old children in September, 1935, as compared with only 390 during the same month in 1934. Similar reports from the states of Indiana and North Carolina indicate an unmistakable trend toward increase in child labor.

California Enacts Resolution

During the summer of 1935 the general assembly of California enacted a resolution from which these are quotations: "Whereas many thousands of school children are employed in violation of provisions of the school code; and, whereas child labor in this state exists at an appalling rate," the Assembly called upon state and local boards of education and all California citizens to "enforce with the utmost diligence the provisions of the school code."

The National Child Labor Committee is convinced of the necessity of uniform national regulation of the employment of young persons and hopes to see the pending amendment to the federal constitution, giving Congress power to regulate the labor of all persons under eighteen years of age, ratified by the requisite number of states some time during the legislative year of 1937. During the period of three years between and inclusive of 1933 and 1935, eighteen states have ratified this amendment.

Until such time as Congress may be given power to enact uniform national regulatory laws, the child labor statutes in the several states will continue to present a highly complicated and confusing picture, containing many loopholes permitting the perpetration of shocking abuses within the law. Let it not be forgotten that

in one-quarter of the states children under the age of fourteen may be lawfully employed during school hours under certain circumstances, and that everywhere children of tender ages continue to work in unregulated pursuits, such as street sales of newspapers and magazines, and domestic service.

The manifold needs in the improvement of existing child labor laws are summed up as follows in a 1933 publication of the U. S. Department of Labor: "(1) To make the laws more comprehensive as to the employments covered; (2) to raise the minimum age standard for general employment; (3) to raise the age to which regulatory provisions apply; (4) to revise downward the maximum hours permitted by law; (5) to extend to minors increased protection against occupational hazards; (6) to improve administrative machinery, (7) to improve the coordination between child labor and school attendance laws."²

The prevention of truancy is more than a mere mechanical matter of law enforcement. It is a matter of social service, involving investigation of environmental factors.

Enforcing Compulsory Attendance

For this reason the enforcement of compulsory attendance laws should be largely in the hands of a staff of visiting teachers who form a liaison between the school and the home.

It cannot be said that any state has made fully adequate provision for universal public education until it has made provision for a modern school attendance service performed by a carefully chosen and highly qualified staff of socio-educational workers. This service should also be coordinated and stimulated throughout the state by adequate supervision from the department of education. At present only half a dozen states have divisions of their state departments of education set up to give adequate supervision to the attendance service and to act as a clearing house for information on the subject.

²Child Labor Facts and Figures, U. S. Department of Labor, Children's Bureau, Publication No. 197, 1935.

A County Superintendent Proposes

this unique plan for developing leadership, promoting legislation and choosing state boards

By A. E. CONDON

FOR many years public education has been in need of some militant organization that would reach out into the various groups of society to bring about more effective legislation and state board rulings for the benefit of education.

Most state boards of education are either appointed by the governor, who is a political official, or they consist of ex officio members, or they are a combination of the two. Those appointed by the governor are too often subject to his will, and ex officio members generally give their best efforts to represent the business or organization with which they are affiliated. Thus the welfare of boys and girls too often receives secondary consideration.

Only a few members of state boards of education familiarize themselves with the field problems and needs of education. These needs could be better studied by calling conferences in the various parts of the state.

Dividing State Into Districts

Under the plan here proposed the legislature would by statute divide the state into educational districts. Each of these districts would then hold conferences.

The district members would meet in their respective educational districts to discuss local and state educational problems and policies and to elect a member from their district to serve as a member of the state board.

The educational conference, to meet at least once a year, would be composed as follows:

1. One lay member for each 50,000 population or major fractional part, but no county to have less than one or no school corporation to have more than five lay representatives, these to be appointed by the parent-teacher association for two years (eligible to reappointment).

Professional Members

2. One member from each standard normal school and standard college.

3. One classroom teacher or principal for each 200 teachers or major fractional part from each school system, but no county to have less than one, or no school corporation to have more than five teacher representatives.

4. One school board member from each county.

5. County superintendents.

6. City superintendents.

7. One township trustee from each county.

8. One labor representative for each 50,000 population or major fractional part, but no county to have less than one, or no school corporation to have more than five labor representatives.

9. Each of the foregoing bodies to elect its own representatives.

The personnel of a typical education conference as found in Indiana

if nine districts were organized would be as follows: lay members, 13; colleges, 2; teachers, 14; county superintendents, 10; board members, 10; city superintendents, 11; township trustees, 10; labor, 13, making a total of 83.

The conference would elect a chairman, vice chairman, secretary and such other officers or committees as are needed for the proper functioning of a well organized body.

Each district would serve as a laboratory for experimental work and the conference would be an open forum where definite policies could be determined in the light of the needs of education. These policies would be brought before every educational conference throughout the state and pressure groups developed to bring about better legislation. This would give a splendid opportunity to educate and develop leadership in behalf of education from groups other than the teaching profession.

Appointing State Superintendent

The nine members selected by the foregoing nine educational conferences for a term of four years would constitute the state board of education. Each member would bring to the state board meeting a rich background derived from the district conference, thus enriching the deliberations of this important body. The state would then profit from the worth while experience from various parts of the state. The state board would elect the state superintendent, who would also serve as chairman but without vote.

The state board, collectively, would understand every problem and policy of importance throughout the state and thus be better prepared to serve education in the light of its needs.

Happy to Say

By WILLIAM McANDREW

VALENTINES, says Robert Chambers in an old "Book of Days" written in the year in which I was born, are a derivation from the ancient Lupercalia festival of the Romans. The Christian fathers refined the rite. They arranged that there should be written on parchment and drawn out of an urn the names of men and women worthy of thanks and admiration. "To Valentine's Day, bay leaves belong."

I COULD make hundreds of such billets honoring school men. But the Editor gives me a pittance of print for my valentines, which come out by chance. These are they:

PAYSON SMITH, who as educational-head of Massachusetts was, like Saint Valentinus of old, martyred by a revengeful foe, albeit never was there a more honest, upright, able and respected administrator of a great trust for the people's welfare than he.

LOIS MEEK, Columbia University, who by her studies of failure and success of school children showed how promoting mastery in children is an educational technique charged with an amazing effect upon advancement in learning.

CHARLES HUBBARD JUDD, Chicago, who will put off his academic robes and don his fighting togs for any big bout against the foes of education.

ANNA CORDTS, Boone, who by her method of teaching children to read inspires indifferent teachers with a lasting enthusiasm and professional skill.

CHARLES DIETRICH, Boise, because for the good of the people of Idaho he showed how the school monies were stolen by the lumber and mining robber barons.

AGNES SAMUELSON, Des Moines, maker of the state superintendence of education into a force for definite maintenance of high grade teaching in the schools of Iowa, where she secures the skill and spirit she herself embodies in the instruction she gives.

PAUL STETSON, Indianapolis, who sponsored the most successful method of keeping the public informed on the service of its schools.

CHARLES GLENN, Birmingham, who brings schools unharmed through attacks of enemies and makes friends out of foes.

RICHARD WELLING, New York lawyer, who earned degrees in education by attending night classes in the university so as to confute objectors who said his insistence on practical civics teaching was not in accordance with educational theories.

WITHIN the urn I have 113 other billets of educational saints as worthy as these.



THE SCHOOL PLANT



Three Units in One With Room

By H. O. SAXVIK

NOTHING better illustrates the growth of civilization and culture on the prairies of North Dakota than the new \$450,000 high school building recently put in use in Bismarck, capital city of the state.

The structure, built with local and PWA funds, will meet the demand for educational housing in North Dakota's fastest growing city for the next ten years. The building is built in three distinct sections. The main building is 237 feet 9 inches long and 63 feet wide. It houses all the classrooms and a large department for home economics.

Another section is 100 feet by 132 feet in dimension and comprises a combination auditorium and gymnasium with the largest stage of any

school in the state. This section also contains adequate shower and locker rooms for both boys and girls and offices for the directors of physical education.

The third section, 63 feet by 92 feet, is designed to accommodate the industrial department. The three sections are combined in an architecturally desirable whole.

Because Bismarck is rapidly growing, the building was designed to meet more than the present needs, and the money available was devoted to putting as large an amount of space under roof as possible. Thus the home economics and industrial arts

department and a number of classrooms were left unfinished.

Additional use for the building has already been found in a city hard pressed for space by reason of its growth. This is the occupancy by the state PWA of a part of the building for its offices. Classrooms not needed have been allotted to this federal agency. The prospect is also that the future office of the Federal Resettlement Administration, important in this farming state, will occupy the space designed for the industrial arts department. Thus the structure becomes in its entirety a big asset to the city, not only for school purposes but also for housing agencies whose occupancy is of vast importance to the city.



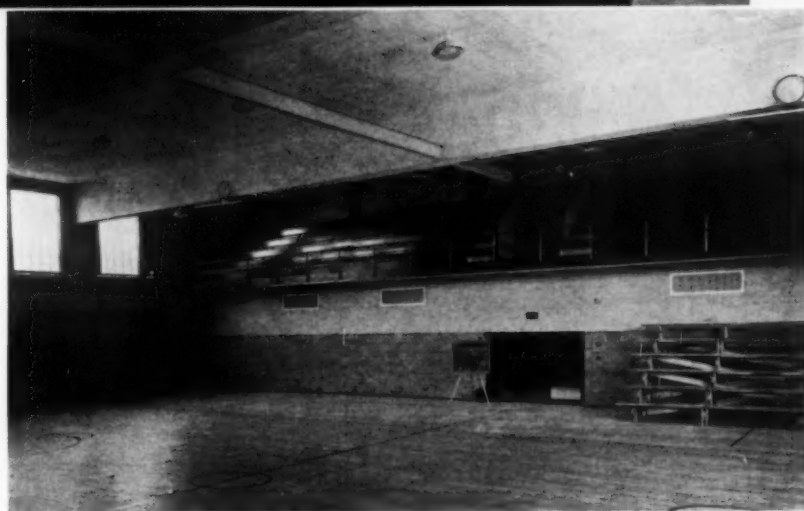
to Grow

The building is architecturally modest and substantial in lines. The foundation is of a dull red limestone from Kasota, Minn. The outside facing of the structure is of face brick, grayish brown in color, placed over a structural steel framework. A large proportion of the exterior walls is of glass providing an abundance of light for all classrooms and corridors. The windows are all double glazed, obviating the need of storm windows. Below all windows are aluminum spandrels to lend a decorative effect.

Two stately entrances are provided, one to the main building and the other to the physical education department. Over these entrances are engraved legends denoting the

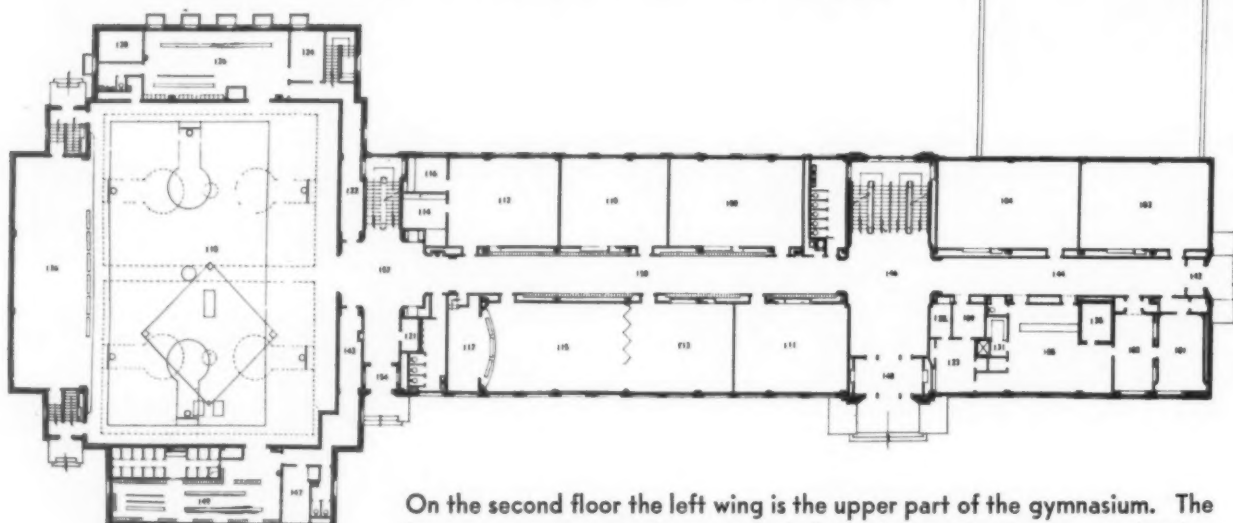
purposes and aim of the school. One inscription reads, "The Public School, First Flower of Our Frontier and Greatest Gift From Our Pioneer Founders". Another, "The Race Climbs Upward Through Its Children. Keep Faith With Them."

The building is heated with steam produced from natural gas brought in from the Montana fields. Radiators are of the univent type, circulating fresh air as well as producing heat. An abundance of hot water is provided for the toilets, showers and

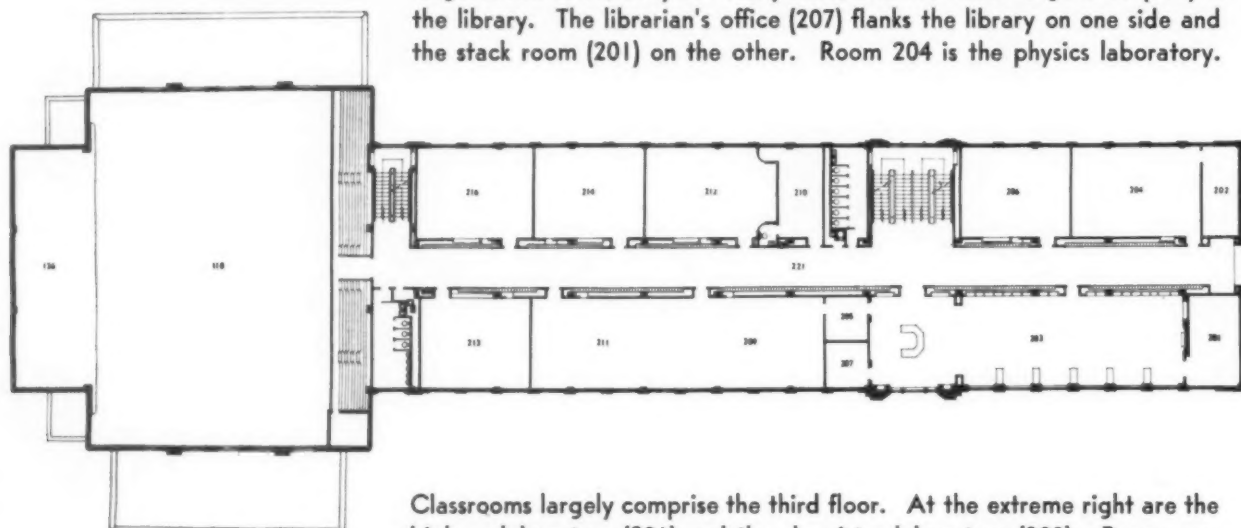


The library, Bismarck High School, has Venetian blinds, walnut furniture and acoustically treated ceilings. The gymnasium-auditorium has the same ceiling treatment; walls are wainscoted with glazed tile.

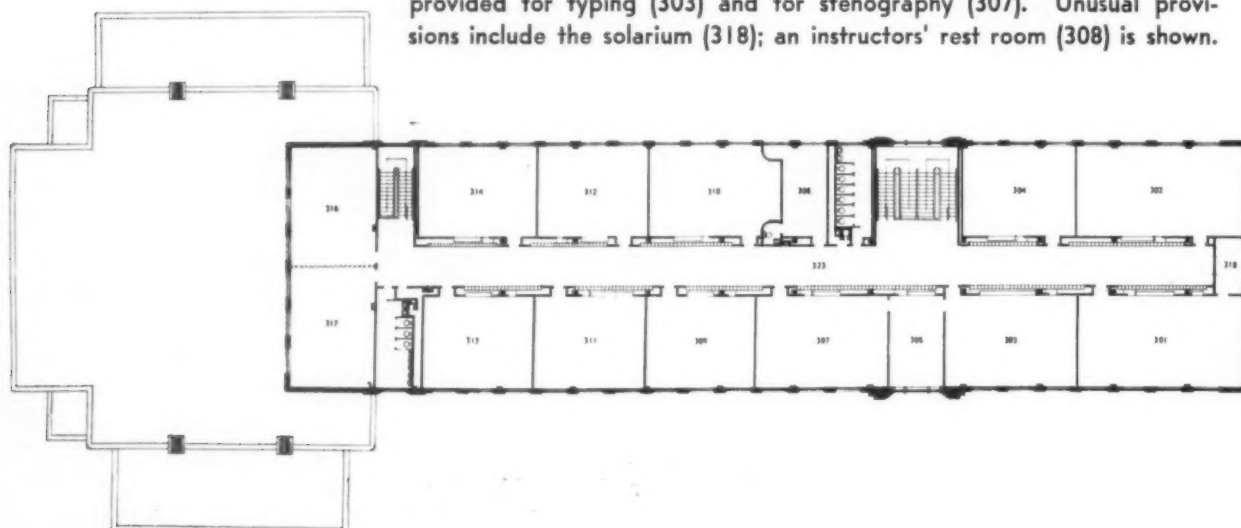
The first floor plan shows the large gymnasium at the left (118) with boys' lockers (126) and showers (128) on one side and the girls' lockers (149) on the other. The stage (136) is at the left of the gymnasium. Coming in at the front door, we pass through the vestibule (148) and enter the lobby (146), at the right of which and adjoining the principal's office (123) is a broadcasting room (125).



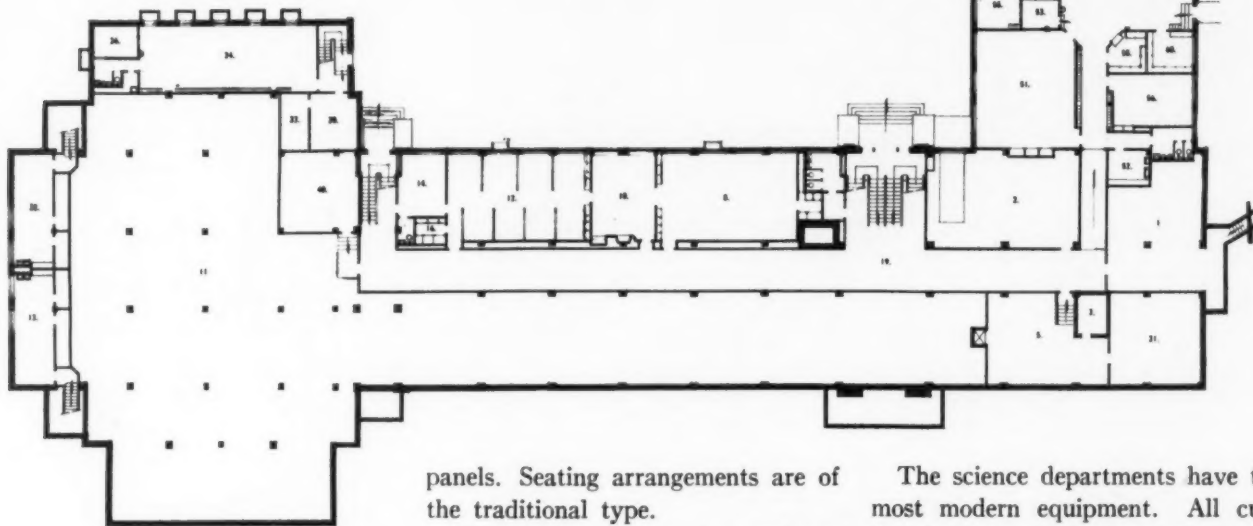
On the second floor the left wing is the upper part of the gymnasium. The large rooms (209, 211) are study halls, and the other large area (203) is the library. The librarian's office (207) flanks the library on one side and the stack room (201) on the other. Room 204 is the physics laboratory.



Classrooms largely comprise the third floor. At the extreme right are the biology laboratory (301) and the chemistry laboratory (302). Rooms are provided for typing (303) and for stenography (307). Unusual provisions include the solarium (318); an instructors' rest room (308) is shown.



Down on the basement level under the stage are dressing rooms (13, 32). The great area under the gymnasium (11) and along the front of the building (7) is unfinished, but additional lockers (24) and showers (26) are provided as well as a room for equipment (40). The wing at the right is given over to various shops.



locker rooms. The heating is thermostatically controlled, not only in the individual rooms but also in the different sections of the building.

The striking features of the building are the two spacious lobbies and the well lighted symmetrical corridors. The first floor corridors and lobbies are faced with Montana travertine, a marble similar to the Italian, while the corridors on the second and third floors are faced with decorative tile. The floors are of terrazzo and the ceilings are of acoustical tile. Corridors are lined with recessed lockers for the accommodation of the pupils. The building is equipped with an incinerator with proper chutes for waste paper from each corridor.

Classrooms are of varying sizes, depending upon their use. The floors are of maple blocks, 9 by 9 inches, laid in mastic. These floors are absolutely squeakproof and provide more elasticity than the ordinary floor. Faculty members cooperated in the planning of all classrooms. Therefore, each classroom is distinctive in its provisions for shelves, cupboards and bulletin boards. Blackboards are of natural slate. The windows have double action curtains and the doors have five clear glass

panels. Seating arrangements are of the traditional type.

The music room at the northeast corner of the educational section is one of the finest of its kind in the state. The walls are lined with rock wool and the ceiling is acoustical tile, which makes the room practically soundproof and permits music practice during school hours. Ample provision is made for storage and music library and a special office for the director.

Near the main entrance on the first floor is what is known as the community room, designed for the use of small gatherings as well as for class purposes. It has a small stage with curtain and wings and will be used for the presentation of school plays, public speaking and debates.

Toilet and washrooms for both boys and girls contain the latest design of sanitary equipment and are partitioned with Vermont marble.

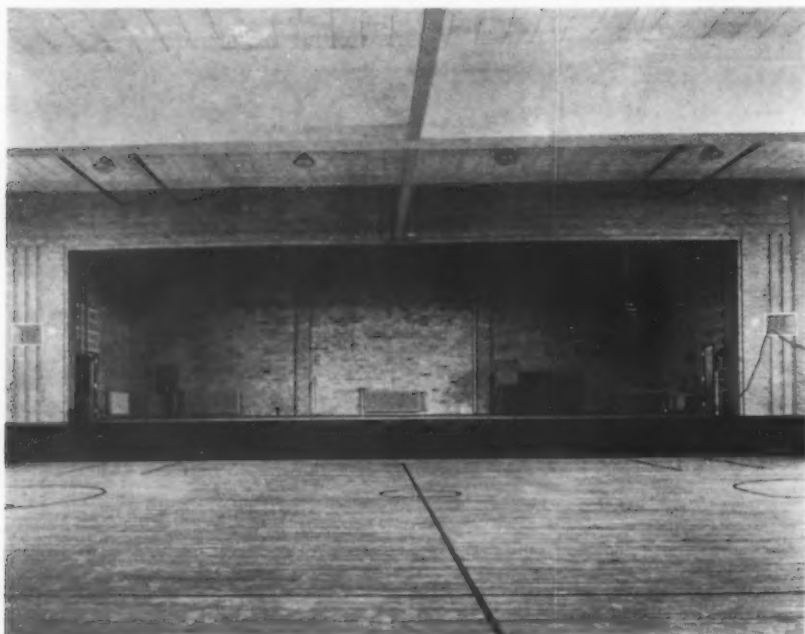
The business offices are conveniently located near the main lobby. There are small offices for the principal and superintendent on either side of the main business office, which is provided with the necessary vault, counters and elevator to the storage room directly under the business office. In this same suite is the room of the board of education. In the business office is located the clock and bell system and also the telephone exchange.

The science departments have the most modern equipment. All cupboards, drawers and furniture are especially designed to meet local conditions and needs. One of the features of this department is an herbarium and fish pond in which plant and animal life will be developed.

The heart of the building is the library. It is a room of beauty and dignity. This room, 86 feet long and 23 feet wide, is beautifully paneled in natural walnut. The shades are of the Venetian type and on the east wall in a space about 40 feet long will be a mural painting depicting some typical Western episode. The furniture, including the librarian's desk and files and the ten library tables, each with six chairs, is also walnut.

An abundance of beautiful fixtures provide adequate indirect lighting. The ceiling is acoustically treated and the floors are of a soft tinted tiling. The shelves of the library proper will hold 12,000 volumes while the stack room will hold many thousands more. An office and a workroom are provided for the librarian. Maximum use is being made of the library, as more than 100 pupils are in there each period of the day for reading, reference and study.

One of the outstanding features of the building is the modern two-channel radio system. Every room in the building, including the gymnasium



The gymnasium-auditorium has the largest school stage in the state. It has a modern system of lighting, and provisions for curtains and scenery.

and library, has one or more loud-speakers. These are controlled from the studio that adjoins the principal's office. Here one may address any room or group of rooms, or all the rooms at one time. Or, two broadcast programs may be received at the same time, some rooms receiving one and some the other. The pupils may enjoy, without leaving the classroom, programs put on by talent from among themselves or from the outside. Such programs may be presented from the principal's office, the music room or the stage of the auditorium-gymnasium. At each of these places microphones are available.

One feature of the radio equipment is the supervisory system. By means of this one can listen in on any classroom. This system, in which the loud-speaker may be used as a microphone, makes two-way conversations between the principal's office and any room possible.

The auditorium-gymnasium is on the same level as the first floor and is fully open to sunlight and air. The walls are wainscoted with glazed tile, making an attractive and clean appearing finish. The ceiling is treated acoustically and provided with an abundance of indirect lighting.

The auditorium-gymnasium is de-

signed for a dual purpose. Ample floor space is provided for basketball and calisthenics. Provision has been made for the installation of partitions so that two practice games can be carried on at the same time. Ample seating has been provided for by the installation of a balcony and folding bleachers.

The auditorium with its great school stage is going to be fully equipped with the most modern system of lighting. It is also equipped with curtains and scenery. It will be used for the presentation of forensics and theatricals. Beneath the stage are two ample dressing rooms and also carriages on which to place folding chairs that are needed for seating on the main floor of the auditorium.

The outstanding feature of the gymnasium is the location of the shower and locker rooms. These are all open to air and sunshine and are equipped with the most modern lockers and showers. To take care of future increase, provisions have been made for additional locker room space in the basement.

The basement is designed to house the home economics and the janitor's quarters, storage space, unloading platform, locker rooms and cafeteria.

The building has been designed in

all its details with a view of making it comfortable and attractive to the pupils. The greatest care has been exercised in trying to safeguard their interests and welfare.

Use of Sponge in Washing Walls

The method of washing walls successfully, according to J. H. Friedl, St. Louis, writing in a recent issue of *Buildings and Building Management*, is closely tied in with the type of sponge used. A soft, fluffy sponge, large, light in weight and absorbent, is necessary for rinsing. With this a section of the wall is first wet lightly with lukewarm water, from floor to ceiling. This will prevent running and streaking when the cleaning solution is applied.

For the next step, the sponge used must be tough in fiber, must have a large flat surface and must be absorbent so that it will hold as much of the cleaning fluid as possible. This sponge is soaked with the solution, wrung out fairly well, and the wall is then rubbed with a circular motion. It is not necessary to rub hard, as the solution is supposed to remove the dirt.

The first sponge is then used again and the wall is rinsed thoroughly with cold water. The sponge is finally wrung dry and the wall wiped in order that all the rinse water may be thoroughly removed to prevent streaking.

County School Head Must Approve Building Plans

The county superintendent is supposed to approve all plans for school buildings to be erected within his county, according to an outline of the duties of county superintendents in the state of Illinois in the *Educational Press Bulletin*. He must have a thorough knowledge of school building practices and give many hours to the scrutiny of any plans submitted to him. He must also be on the alert to report buildings which need to be condemned.



Let There Be Less Noise!

By CARL J. ECKHARDT, Jr.

THE University of Texas found itself in 1929, upon the threshold of a vast building program which was ultimately to involve an expenditure of approximately \$10,000,000 for physical plant development. The great need for an auditorium of a sufficient size to seat the institution's entire student body had long been recognized. A gymnasium was, furthermore, badly needed.

Funds immediately available would not permit the simultaneous construction of two such large structures. It became necessary, therefore, to construct a gymnasium-auditorium even

though the deliberative thought devoted to the planning of such a dual purpose building had conclusively revealed the fact that many difficulties would arise from the consummation of such a plan.

The building conceived represented a compromise between designs calculated to produce the best auditorium and those regarded as being essential for a gymnasium. The economy with which such a dual purpose building could be built and the great number of benefits to be derived therefrom

made its construction an entirely reasonable undertaking.

As might naturally be supposed, the building was arranged to provide facilities for all indoor sports and to include a large auditorium.

The building as a whole serves many useful purposes. Its auditorium, however, is subject to the most diversified use. The cubic content of this large room exceeds 1,000,000 cubic feet. Its seating facilities accommodate an audience of 8,000 persons. In order that this place of

concourse might most advantageously serve the purposes for which it was intended, removable seats were provided for the main floor and balconies were constructed at either side, and at the rear of the auditorium.

Upon some occasions, such as the exercises at the time of graduation and affairs of the state of Texas, this auditorium is completely filled by audiences numbering 10,000.

At other times, when dances and kindred social functions are held, the activities of those in attendance are confined solely to the main auditorium floor. At such times the unoccupied balconies are completely exposed. When athletic carnivals are conducted in this place, the participants, comparatively few in number, occupy the main auditorium floor and the audience occupies the balcony spaces.

That some acoustical difficulties should be encountered in this large place of assemblage was axiomatic. The difficulty so frequently experienced in large auditoriums, reverberation, was encountered. The linear distance from the back of the stage to the seats farthest removed from the stage approximates 250 feet. The average width of this auditorium is nearly 150 feet and the ceiling is 70 feet above the floor at its high point.

The floor had of necessity to be fashioned of a highly polished wood. Front and rear walls were constructed of unpainted brick. The side walls below the balconies are likewise fashioned of unpainted brick. The entire balcony structures consist of a reinforced concrete type of construction upon which wooden seats were placed. The roof of this structure, with the exception of the middle section, which covers a large central monitor, is made of cork lined tile. The tile covering the monitor involves the use of clear glass insertions in order that a sufficient amount of light may be admitted.

Only a casual inspection of the following table, in which are shown the coefficients of absorption of the building materials incorporated in the design of this room, is required to reveal

the fact that any sound produced in this enclosure had of necessity to be reflected from surface to surface a great number of times before its energy could be completely absorbed.

<i>Material</i>	<i>Coefficient at 512 cycles</i>
Wood (floor)	.03
Unpainted brick (front and rear walls)	.03
Unpainted brick (lower side walls)	.03
Concrete (balconies)	.015
Cork lined tile (roof)	.30
Glass lined tile (roof)	.015

The prolongation of the sounds resulting from continued reflection from these hard interior surfaces was such that the period required for sounds produced by a speaker or a musical instrument to die out or become inaudible was exceptionally long. This resulted in the accumulation of direct and reflected sound, a blurring or running together of syllables of speech or notes of music.

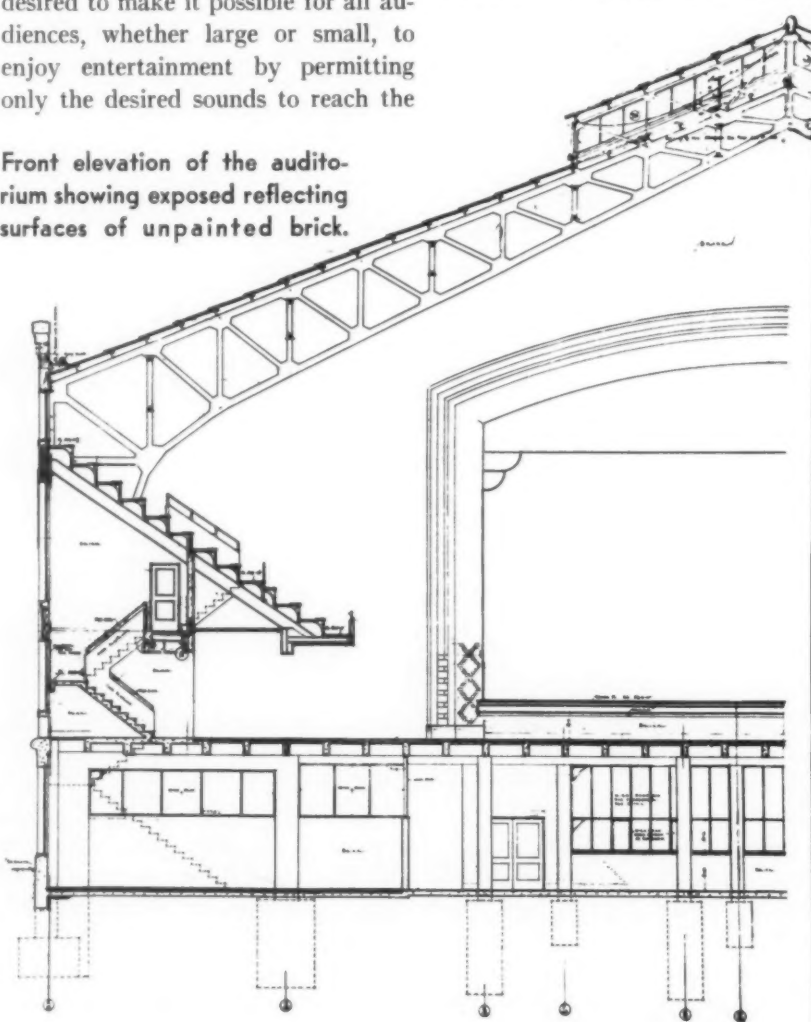
An improvement of audition was desired to make it possible for all audiences, whether large or small, to enjoy entertainment by permitting only the desired sounds to reach the

listeners and by preventing extraneous noises from interfering with music or speech.

Fortunately the University of Texas had in its teaching staff a recognized authority on matters related to the production and absorption of sound, Dr. C. P. Boner. Because of his great interest in such matters, Doctor Boner, a member of the physics faculty, had made careful and painstaking analyses of the conditions existing in this auditorium. For the foregoing reason the mode of procedure selected for this work was determined by him.

The analyses made readily revealed the fact that the cork lining placed on the roof tile did not aggregate an absorbing power sufficient to reduce the reverberation period to a desirably low figure. For that reason it immediately became apparent that a considerable number of sound absorbing units needed to be provided in the form of an acoustical treatment in

Front elevation of the auditorium showing exposed reflecting surfaces of unpainted brick.



order that the existing undesirable condition in which the multiple reflections appeared as a mass of sound filling the auditorium with a gradually decreasing intensity might be eliminated.

A considerable amount of exposed reflecting surface in the form of unpainted brick was incorporated in the design of the front wall of this structure. This surface approximated 3,000 square feet.

The use of highly absorbent materials for acoustical treatment so near the stage and so near the speakers of an amplifying system, which were placed on either side and above the proscenium arch, was not regarded as being in keeping with good practice.

In view of the fact that an acoustical treatment had originally been applied to ceiling surfaces and that it was not acoustically feasible to treat the front auditorium wall, it was naturally logical to resort to as much treatment on the rear wall as possible.

A study of the physical dimensions of the exposed rear wall revealed the fact that 2,000 square feet of treatment could there be applied to cover unpainted brick surfaces. The high-

ly reflective rear balcony surfaces, which were fashioned of concrete, were known to be contributive in no small degree to the unsatisfactory auditory conditions experienced. In this rear balcony approximately 1,500 square feet of concrete riser surface between the respective rows of seats needed to be treated. Similar riser surfaces requiring treatment in the two side balconies approximated 3,000 square feet.

In view of the fact that the application of an acoustical treatment to under balcony surfaces was recognized to be less effective than that applied to walls and ceiling of the main portion of the auditorium, it was determined to confine the treatment proposed to rear and side wall and balcony riser surfaces. Additional treatment was, however, recommended for the ceiling and wall surfaces of stair wells leading at various points from the main floor into the balconies. The total wall treatment aggregated 4,000 square feet and the total riser treatment amounted to 4,500 square feet.

Little, if any, difficulty was experi-

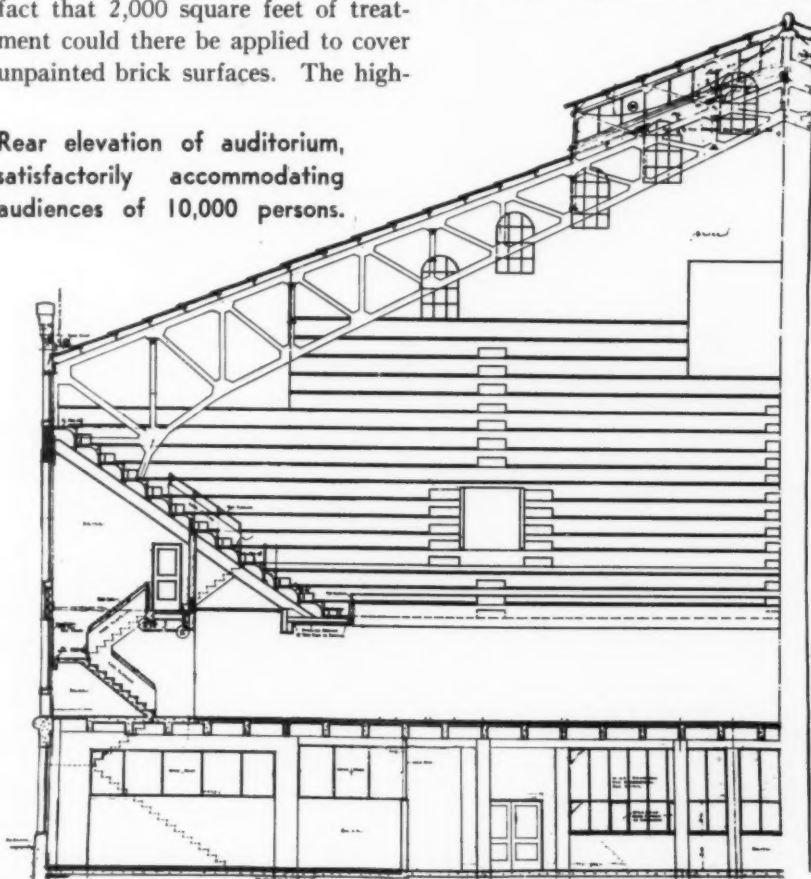
enced in selecting a proper treatment for wall surfaces. The material chosen for this purpose consisted of rock wool acoustical tile, a noninflammable, inert mineral material that will not harbor or support vermin. This tile consisted of blocks 12 inches by 12 inches by 1 inch thick, having all front edges beveled and was cemented to the wall surface by the use of heat and moistureproof cement. The absorption characteristics of this material are shown in the following tabulation of data.

<i>Frequency Cycles per Second</i>	<i>Absorption Coefficient</i>
128	.27
256	.47
512	.66
1024	.82
2048	.83

The application of an acoustical treatment to the vertical riser surfaces in the balconies could under no circumstances be made in the simple manner previously described for wall surfaces. The greatest difficulty encountered in conceiving a proper riser treatment arose from the fact that this acoustical treatment unlike others, which generally consists of fragile materials, had to be placed on concrete riser surfaces where it was subjected to constant abuse resulting from the "scuffing" action of the heels of the audience occupying the balconies. An inspection of such riser surfaces clearly revealed the area to which such "scuffing" action was generally confined. For the foregoing reason a number of test acoustical panels were installed to the surfaces that were generally subjected to the least abuse in order that definite knowledge might be secured relative to the capability of various types of construction to withstand the abuse to which it was known to be subjected.

A brief period of observation was required to demonstrate the fact that a durable type of construction would have to be resorted to in the case of riser treatment. As might naturally be supposed, at times when athletic activities are conducted in this auditorium the interest of the spectators

Rear elevation of auditorium, satisfactorily accommodating audiences of 10,000 persons.





Acoustical treatment was applied to the rear and side walls and to balcony riser surfaces.

is great and the excitement of the "rooters" is intense. Upon frequent occasions all available means of making noises are resorted to by those in attendance. The kicking of heels is frequently employed for noise making purposes.

The use of rock wool blankets protected by a system of wire mesh screens supported on wood grounds was found to be unsatisfactory. This material did not have a sufficient stability, for, having little resilience, if kicked a number of times in the same place it soon lost its shape and position. The accumulation of foreign material in back of the wire mesh revealed the fact that the protecting material needed to have either fine wire mesh or extremely small perforations.

That this problem could not be solved by the simple application of the acoustical material itself without a protecting member was conclusively demonstrated by the gradual deterioration of all such materials applied in this manner in test panels. For the foregoing reason a type of acoustical treatment protected by a perforated metal panel was next resorted to in this auditorium. Fortunately this type of construction proved to be entirely satisfactory.

The structure used to support the

sound absorbing elements placed on vertical riser surfaces is composed of a system of wood grounds. The upper horizontal grounds were in all instances securely attached to the under side of wood seats by the use of flat head wood screws placed at regular and frequent intervals. Lower horizontal and vertical grounds were rigidly mounted on the concrete risers by the use of lead anchors and suitable flat head machine screws. All wood grounds were made of 1 inch by 1 inch first quality pine wood. Vertical wood grounds were placed at intervals no greater than 4 feet.

The sound absorbing elements used for such riser panels were cemented to the concrete surfaces by the use of a heat and moistureproof cement. The rock wool sound absorbing elements used for this purpose had the following absorption characteristics.

Frequency Cycles per Second	Absorption Coefficient
128	.50
256	.79
512	.87
1,024	.79
2,048	.77

After the absorbing elements were securely cemented in place an acoustical steel panel of a sufficient size to cover both the elements and the

wood grounds was rigidly nailed in place. All edges of this No. 24 gauge perforated steel panel were then completely covered with 1/2 inch by 1 1/4 inch No. 20 gauge metal molding.

The Acoustical Materials Association in its Bulletin 20 M 2-34 gives the following table of "Desirable Reverberation Times".

Volume	Theaters and School Auditoriums	Sound Pictures
100,000-200,000	1.2 ± .3	1.2 ± .2
200,000-400,000	1.3 ± .3	1.3 ± .2
400,000-800,000	1.4 ± .3	1.4 ± .2
800,000-1,000,000	.....	1.6 ± .2

The foregoing reverberation periods are given for a frequency of 512 cycles with capacity audiences present. As might naturally be expected, the reverberation period in this auditorium after the installation had been completed was still of a variable nature because of the difference in the purposes for which it is used and the difference in the number of people in attendance. For this reason no precise reverberation time can be set for this structure. For a given set of conditions this reverberation time can in most cases be computed with a reasonable degree of accuracy by the use of W. C. Sabine's formula:

$$T_0 = .05 \frac{V}{a} \text{ where}$$

T_0 = the time in which the reverberant sound sinks to 1/1,000,000 of its initial intensity.

V = the volume in cubic feet

a = the total absorption of the room

The reverberation period of this auditorium in its treated condition when empty approximates 2.98 seconds and the reverberation period when occupied by an audience of 8,000 approximates 1.30 seconds. From the inception of this work improvements in the auditory characteristics of this auditorium have been clearly perceptible.

The completion of this project has left the auditorium in a condition in which its usefulness has been materially enhanced. The enjoyment of its audiences has been materially increased as a result of the elimination of the previously experienced exceptionally long reverberation period.

More Federal Funds for Education

By ALICE BARROWS

Among recent events in Washington of importance to educators was the allocation in December of \$1,983,000 for five educational projects to be conducted under the direction of the U. S. Commissioner of Education, John W. Studebaker. This included \$330,000 for the organization of forums in ten communities on the Des Moines plan of adult civic education; \$844,000 for studies in ten states which will provide a sound basis for reorganization of administrative units; \$500,000 for university research projects in which unemployed graduates of universities and colleges are to work on various cooperative studies; \$75,000 for an educational radio project, and \$234,000 for the study of opportunities for vocational education and guidance for Negroes.

The last named study is to be made in thirty-four states and it is estimated that it will take seven months to collect the detailed data on the various types of vocational education opportunities in regular day schools, evening schools and part-time schools. One of the most interesting items in the study will be the survey of "where vocational work is housed," including the number of rooms and amount of space provided for each kind of vocational work, and the type and condition of equipment.

In addition to the foregoing five projects, the Works Progress Administration has allotted to the thirteen states here listed funds for statistical and research projects in education dealing mainly with school buildings and finance. These allotments cover the period up to Jan. 15, 1936. They do not include projects for testing programs, curriculums studies and adult education.

APPROVED EDUCATION PROJECTS ON BUILDINGS, EQUIPMENT AND FINANCES, FOR WHICH WPA FUNDS HAVE BEEN ALLOTTED, AS OF JAN. 15, 1936.

<i>Subject</i>	<i>Coverage</i>	<i>State</i>	<i>Federal Allotment</i>	<i>Total Budget Inc. Fed. Allotment</i>
Preparation of maps, charts and tables showing educational trends as to conditions, progress and needs.	Statewide	Alabama	\$ 8,640.00	\$ 8,640.00
Ability of rural schools to operate a normal term. Plan for repairs and alterations of school buildings necessary to keep them in condition.	Statewide	Arkansas	3,000.00	6,000.00
Determine educational status of students and financial condition of school districts.	Los Angeles (county)	California	66,580.00	83,890.00
Survey of school housing facilities, textbooks and teacher health.	Twelve counties	Colorado	12,733.80	12,933.80
Reorganization of local attendance units; survey Colorado school housing needs and available resources.	Selected metropolitan areas—Denver, Pueblo, Colo. Springs	Colorado	15,097.75	15,497.75
Study of problem of state and local public school administration.	Statewide	Colorado	13,942.00	14,392.00
Research study in school finance.	Statewide	Colorado	12,054.37	12,454.37
Canvass of schooling needs.	Meriden (New Haven Co.); every 10th family	Connecticut	520.00	546.00
Rural school survey; making detailed maps of each county to show ability to support education, etc.	Statewide	Idaho	51,544.00	51,544.00
Physical inventory of school buildings and equipment.	St. Paul (Ramsey Co.)	Minnesota	23,900.00	26,146.60
Statistical compilation of unit cost of education per student.	Statewide	Montana	3,000.00	3,397.74
Data in regard to monies used in the support of public education.	Statewide	North Dakota	8,964.00	9,560.00
Complete inventory by questionnaire of all school properties.	Statewide	South Dakota	5,784.00	6,566.00
School lands and federal land grants	Statewide	Utah and near-by States	11,916.00	12,416.00
Study consolidation of Utah school districts.	Statewide	Utah	4,790.00	5,090.00
To compile and tabulate data to recommend a plan of financing the public schools of the state.	Statewide	Utah	4,855.00	5,255.00
A study of the fiscal, administrative and attendance units of public schools of the state for purpose of reorganization of a long-term public school program.	Statewide	Wisconsin	93,226.00	106,226.00
To furnish assistance to the state planning board in checking school construction.	Statewide	Florida	12,908.00	21,258.00
	Total		\$353,454.92	\$401,813.26



History of mankind in terms of physical and mental labor; detail of mural in foyer of Brooklyn Technical High School. Below: Panel depicting Africa, decorative map of world, fourth floor corridor, Julia Richman High School.



Wall panel, Art in Middle Ages, Textile High School auditorium; other panels of same series, shown at bottom of opposite page.



Mural Paintings in High Schools of New York City * *



"Alma Mater," sculpture in
library of Evander Childs.

At right, fresco, Evolution of Western
Civilization, in Evander Childs library.



BETTER PLANT PRACTICES • • •

"Cleaning House" in the Boiler Room

"It is the general custom for school janitors, engineers, and custodians," according to Conrad Pykoski, operating mechanical engineer, Board of Education, Minneapolis, in discussing the inspection and rating of engineering service, "to take all the broken furniture and debris found in the school buildings to the boiler rooms for storage. For this reason inspections of the boiler rooms should be made frequently to discover how much junk—such as old pipes, lumber, old grates, boxes, empty cans, drums—is lying about, especially tucked away in the corners. By having a lot of this old material lying around, the boiler and engine rooms cannot be properly cleaned, for the reason that the men will not move it each day in order to sweep the floor under it. As a result, floors and corners soon become dirty and unsightly. And if this practice is allowed to continue, it soon becomes the practice for everyone having any rubbish to throw it on the junk pile in the boiler room.

"If the boiler and engine rooms are to be used as the school dump, then it is up to the engineer to sort out and dispose of all the material that cannot be used, either by sending it to the school repair shop or by getting permission from the proper authority to burn it, and to pile the good material in a neat and orderly manner so that the floor may be cleaned around and under it. The usable material then should be protected from dust and dirt. In many school systems a central storage place is provided for all usable equipment, and it is up to the engineer to send all equipment in good condition to such storage place."

School Janitress Best at Cleaning Classrooms

Women as cleaners in the janitorial set-up are advocated by H. S. Mitchell, business manager, Fordson Board of Education, Dearborn, Mich. "We believe," says Mr. Mitchell, "that our plan differs from that in general use, principally, because of the percentage of our work done by women, and their hours of duty, and these, we believe, are its best points.

"A woman, by nature and by experience, is a good cleaner. In our opinion,

a man is almost as awkward at cleaning a classroom as he is at sewing on buttons. Our janitresses take the same pride in having their individual sections of the building cleaned properly as they do in their homes; and, because of the number of applicants, it is not difficult to select the type of woman who takes pride in her home.

"We are told, by our applicants, that our work is particularly desirable because of the hours of duty. A woman can take care of her regular household duties and hold her position as a school janitress. She does not report for work until her children have returned from school; and, in cases in which there are

An Invitation

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

small ones, those returning from school are able to care for them while the mother is at her work. On the other hand, her income is a welcome aid in carrying out the family budget. This is particularly true in the case of widows.

"We have found that the old saying about 'the Jack-of-all-trades who is master at none,' is literally true. We do not expect a man to be a good electrician, carpenter, plumber, painter, roofer, plasterer and many other things, and, at the same time, be a good engineer and janitor. Therefore, we try to limit the duties of our engineers, firemen and janitors to the operation of the building. We do expect, however, that the term 'operation' should include the simple minor jobs, such as the replacement of broken window glass and adjusting door closers.

"Our maintenance crew consists of men who are qualified for the various construction trades, and insofar as is

possible they work at their trades; however, it sometimes happens that a particular tradesman will have several men on other trades working with him as helpers. In this way, we are able to limit the size of our maintenance crew to the quantity of work to be done.

"In some of our smaller buildings, the engineer is the only man employee not in the instructional department. He is in general charge of the operation of the building and responsible to the principal. However, the general rules and regulations are issued by the business manager in the same way that the superintendent controls the instructional department in each building.

"The engineer warms up the building in the morning and unlocks the doors at the usual time. During the day, he services the various items of equipment, makes minor adjustments, renders such service as is requested by the principal, and keeps the building properly warmed and ventilated.

"Our schools close at 3:30 p.m., and all of the pupils and teachers are usually out of the building by 4 o'clock, at which time the janitresses report for duty. The engineer locks all the doors of the building, issues such instructions regarding the cleaning work as are necessary, including the distribution of janitorial supplies, and his day's work is done.

"The janitresses work from 4 until 5:30 on each school day, and from 7 until 9:30 Saturdays, when the regular weekly cleaning work is done. During the one and one-half hours, they are expected to clean the equivalent of three classrooms and the adjacent corridor. However, certain adjustments are made where special rooms, lobbies, offices and lavatories are to be included.

"In the larger buildings, where we have swimming pools and locker rooms, with consequent increases in corridor space and lavatories, we employ as many men janitors as are required to do this heavier or more strenuous type of work. These men report for work at 1 o'clock and, during the early part of their day, they take care of such transfers of furniture and minor repairs or adjustments as can be done before the pupils leave the building, at which time they begin their regular cleaning duties. They work until 9 o'clock, and their duties are adjusted to conform to the individual school, that is, of course, insofar as janitorial work is concerned.

"Some of our buildings are also large enough to require the services of firemen to assist the engineer in operating the boilers and other mechanical equipment. The number of men and their hours conform to the size of the building."

"You May Go to the Board"

By W. F. CREDLE

"No better training in the democracy of learning can be furnished our school children than the give-and-take criticism afforded by the proper use of a blackboard."

—Dresslar.

THE early blackboards, while passing as teaching devices, were oftentimes instruments of mild torture. As such they deserve a place alongside of the hickory stick—famous in song and story. Research would doubtless show a very close correlation between the two during the closing days of the nineteenth century and the first years of the present one.

What person now in the late thirties, or early forties, does not remember the doleful days of the years beyond recall when the teacher with hickory stick in hand, and an uncanny but certain knowledge in her head that you had not worked your arithmetic, said: "Johnny, you may go to the board." Her suspicions were soon confirmed as you made meaningless numbers and uneasily shifted from one foot to the other. All the while you were silently praying and hoping against hope that you would be sentenced to "stay in after school" rather than be immediately, summarily and soundly thrashed.

Happily, the welkin no longer rings with staccato thuds from the unsparred rod and the blackboard has become an effective teaching aid, fulfilling its mission in facilitating the educational process.

There is ample history to support the thesis that blackboards, certainly their forerunners, have been in use for some four hundred years. However, there is but little evidence that they received the attention they deserved in some of the states before 1900.

In the "Documentary History of

North Carolina Schools and Academies, 1790-1840," there are only two references to blackboards and work on the blackboard. The first is to the use of the blackboard in Raleigh Academy in 1835. A visitor to the school made the following observation: "To see young boys, not more than ten or twelve years of age, before the Black Board, solving statements in 'interest' & 'The Rule of Three,' with the readiness and accuracy of a skillful accountant, was what I have never before seen: nor, indeed, had I not witnessed it at the present examination, could I have believed it possible."

The other reference is by "A Visitor" to the Asheboro Academy in 1839. He laments: "She does not use the *black board* teaching Arithmetic; the only *material* defect I observed or heard of in the management of the School. It is much the best method of teaching Arithmetic." This teacher was from Boston, and in an advertisement of the "Female Academy"—"The Trustees flattered themselves over her distinguished qualification."

We find the following in the North Carolina Public Laws of 1869: "He [the state superintendent] shall cause to be printed such suggestions on school architecture as he may deem useful with such woodcuts and plans as he may be able to obtain." This was done, but neither the woodcuts nor the suggestions contained anything about blackboards.

The superintendent of public instruction of the same state in his biennial report of 1889-90 gave an

abundance of advice to teachers but made no reference to blackboards as a part of the classroom equipment. He did avow that "all good methods now recognize that little children must use slates and learn to write while they are learning to spell and read in the elementary books."

In the "Course of Study for Teachers in the Public Schools of North Carolina by State Board of Examiners," published in 1898, quite detailed methods for teaching the "books that are among the best" are given, but there is nowhere in the study a reference to blackboards. The nearest approach is the following: "*Addition*. Make a chart containing the following combinations . . . This chart should be made on a large piece of Manila paper and fastened to the wall and the children should be taught to know the sum of each group at sight as the teacher points to it. . . . Give a great many examples like these for slate work."

It seems reasonable to presume that there was sufficient knowledge of blackboards during the nineteenth century, but that their value was not generally recognized. That this was not local to North Carolina is evidenced by the fact that many of the men teachers were from Yale and other Northern universities, and many of the women teachers were "experienced preceptresses from the North."

In view of the foregoing, it is rather surprising to find quite modern plans incorporated in the report of 1900-1902 and the reference made to the types and placement of blackboards: "The blank walls on one or more sides of the school rooms should be fitted with slate or good composition blackboards, with chalk trough at base. The boards should be from 3 to 4½ feet high, and set from 2 feet 1 inch to 2 feet 4 inches above floor for primary scholars, and 2 feet 6

inches above floor for intermediate scholars." The blackboard as an integral part of classroom equipment had been recognized in North Carolina, and, doubtless, throughout the country.

It is evident that the first blackboards were enlarged and sublimated slates. By the same token they were first resorted to because of the impossibility of obtaining paper, or even slates, for general individual use. In the illustration in the "Thirteenth Century Sacrobosco Manuscript," referred to by Dresslar in his article on blackboards, the boy seems to be unmistakably exhibiting work on what was evidently the community slate.

Early Blackboards Poor

Likewise, it seems reasonable to conclude that many of our early schoolmasters, as writing materials became more common, resorted to the blackboard as a device to check up on the thoroughness of the pupils' preparation, and oftentimes to prevent furtive glances at solutions of problems previously made by fond parents or more advanced students. It is of record in one institution of note that "propositions were demonstrated [on blackboards] without a book, or any aid to the memory whatever."

The lack of imagination and initiative shown in improving blackboard materials for many years is amazing. The lackadaisical attitude taken by the general run of school administrators with regard to the best types of boards is depressing. The rather drab story can be briefly told: The vast majority of the early blackboards were blackened boards. A section of the wall back of the teacher's platform was painted. Occasionally wide boards were placed in this space, thereby making it possible for a problem involving considerable multiplication to be exhibited without much division by cracks in the wall. In some of the wealthier districts tongue and groove boards were fabricated into quite even surfaced blackboards. These were placed on stilts and could be moved about.

Perhaps the most common of the early commercial boards were not boards at all but painted or slated cloth nailed on the front wall of the classroom. The stretching necessary to eliminate the creases soon made the puny fabric conform to the indentures in the wood to which it was nailed. Chalk troughs were rarely used. Consequently the blackboard end of the room was soon covered with chalk dust. The edges of the cloth became frayed and frazzled, and the nails pulled out. The early blackboard lacked much of beauty!

With the coming of cheap paper and pencils and pens and ink, the good old individual slate began to disappear. The late Victorian health crusaders had vehemently condemned it as unhygienic and a spreader of filth and disease, but the enterprising miners and manufacturers were not to be defeated. They began to make larger slates—large enough, indeed, to cover whole sections of the classroom wall. Improved methods of teaching stimulated a healthy demand for their wares.

State Boards Win Acceptance

Many of the faults of the small slate—the glare, the susceptibility to grease and dirt, and the noise—were proportionately multiplied in these early larger slates, and they contained many faults not generally found in the smaller article—uneven surfaces, variations in color, uneven thickness and unsightly seams between the sections.

Happily, experience soon corrected many of these defects and concurrently with the rather universal recognition of blackboard as an indispensable part of the classroom equipment slate came to be recognized by many as the "pound sterling" of blackboard materials.

If you will "treat your blackboards white," according to the admonishments and directions of Fred W. Frostic in *The NATION'S SCHOOLS* for January, 1935, a number of the *in use* faults of slate will be eliminated.

While it is undoubtedly true that not as much blackboard as was at

one time specified is required by present day teachers, there is certainly no indication that blackboards will at any early date become obsolete.

The materials, other than those mentioned above, that have been used for blackboards are legion. Many of the results have been unsatisfactory, however. Much of the effort has seemingly been to produce a cheap marketable substitute instead of something "just as good as slate." In this, the producers have erred. Even if slate were economical enough and the quantity produced sufficient for wider use, there would still be a field for other boards.

Advantages of Composition Board

An approach to a solution of the problem is evidenced in a so-called composition board possessing the following apparent advantages:

1. It is economical.
2. It is at present produced in green and black.
3. It is easily cleaned.
4. The fiber part of the board is so fabricated that it can be readily resurfaced (a remote necessity).
5. This particular board—if properly installed—does not absorb moisture.
6. It is not noisy.
7. The bothersome joints are practically eliminated.
8. It comes, or can be cut, in sizes to fit any situation.
9. It lends itself to experimentation in the use of colors other than slate or black or green.
10. Its light weight makes it adaptable to a variety of convenient installations.

The one time objection to fiber boards, that they "buckled," no longer obtains. Simply nail the board at the top and leave a little expansion space in the lower part of the frame and between the strips. Metal seam covers are available for covering the loose ends between the sections. Likewise, a modicum of waterproofing on the proper kind of backing makes it moistureproof.

(Continued on page 60)

MOUNT EVEREST . . . TOP OF THE WORLD

Rearing its mighty head 29,000 feet into the air, Mount Everest is the top of the world. No other peak can match its height. No living man has ever set foot on its summit. Everest remains supreme and unconquered.



SYRACUSE CHINA... *the top!*

THIS American-made china holds the unquestioned leadership in the field of institutional ware—a leadership which can be of definite value to you.

Weight for weight, Syracuse China is the strongest china made. It lasts longer—costs less per year. The pattern is protected by a hard glaze—it cannot fade or wear off. Every piece is unconditionally guaranteed against crazing (crackling of the glaze). And, when breakage does occur, replacements are quickly available. Another important advantage is the patterns themselves. The colors,

although under glaze, are as bright and clear as over-glaze colors. There are many attractive patterns in stock for immediate delivery. Or, if you prefer, we will design your own special pattern, incorporating any symbol or motif you desire. Three attractive body tones to choose from—White, Old Ivory and Adobe.

Syracuse China will help you make money and save money. Ask your supply house for complete information. Or write direct to: Onondaga Pottery Company, Syracuse, New York. New York Offices: French Bldg., 551 Fifth Avenue. Chicago Offices: Garland Bldg., 58 East Washington Street.

Syracuse China
A PRODUCT OF ONONDAGA POTTERIES

POTTERS TO THE AMERICAN PEOPLE SINCE 1870

(Continued from page 58)

Fiber boards will not stand an indefinite amount of washing, but this is not necessary. We live in a dry cleaning age. A composition board can be handily and satisfactorily cleaned with a good eraser. The wise teacher has a piece of chamois cloth at hand for the *coup de grâce* at the end of the day.

An important phase of the whole blackboard problem is that looking toward a writing surface that will not have a coefficient of light reflection much greater than the classroom walls.

In certain centers experimentation is being made in the use of tan and brown boards. As contradictory as it would seem, writing made on them with ordinary white chalk is apparently as easily legible as that on blackboards. Certainly the contrast in colors is as pronounced as pencil writing on the cheaper grades of paper.

This article is concerned with *blackboards*, but the certain fact, as inferred above, had just as well be recognized that modern and well trained teachers in modern and well planned schools are more and more turning to bulletin boards as a display medium for pupils' work. Present day teachers no longer require, nor do they desire, that the "blank walls" be entirely covered with either slate or composition writing boards of the types now marketed and at present installed. They contend, and with convincing argument, that a teacher's demonstration board, not over 10 feet in length, is quite sufficient for the front wall.

The salvaged space at either end of this board can be properly used for hanging appropriate pictures by recognized artists, and at a level where they can be seen and appreciated by the pupils.

On the side and rear walls display space at eye level should be provided for the paper writing and artistic efforts of the children. Likewise, adequate display space for instructional materials and aids is an absolute necessity for those teachers

effectively trained in one of the currently popular and wisely recognized methods of modern teaching. The tack strips above the boards—both bulletin and writing—are serviceable for decorative materials.

Research and results on the part of fiber board manufacturers in producing a warm color board will halt this distinct but perhaps temporary trend away from wall writing boards and the ever increasing use of bulletin boards. In my opinion many of the present day bulletin and display boards lack much of perfection in both composition and color. A combination of these two boards in colors that harmonize with the walls and ceilings will certainly make possible

classrooms that conform to all recognized principles of lighting hygiene and give them an appearance that will be a joy forever to both teachers and children.

Ample scientific experimentation should be made before final judgment is passed upon either the merits or demerits of writing board surfaces other than black or green. In the meantime let all good school administrators exhort all producers of good slate and good composition boards to wage merciless warfare on those fabricators who for a few pennies less impose their puny wares upon an unknowing public and thereby work a hardship on both school teachers and their pupils.

Cleaning Draperies and Furniture

In most modern school buildings there is one room at least that has draperies or upholstered furniture. The rest room for pupils or teachers, the cafeteria, the principal's office, the housekeeping practice room or the kindergarten may have hangings at the windows or an upholstered chair or couch.

To keep these clean is the custodian's task. An easy method of removing dust from curtains is the periodic use of the vacuum tools designed for the purpose. If the drapes are very dusty, they should be taken down and placed on a large sheet of cloth or paper on the floor. The special vacuum cleaning equipment should be used on both sides.

If the draperies are color-fast and of cotton or linen, they may be washed. But if they are made up of a combination of yarns, they may shrink or be affected by soap. These should be dry-cleaned. It is poor economy to select drapery materials that are not color-fast.

For the upholstered couch or chairs, the school custodian will find carbon tetrachloride a highly satisfactory cleansing agent. Spots should be removed just as soon as they occur.

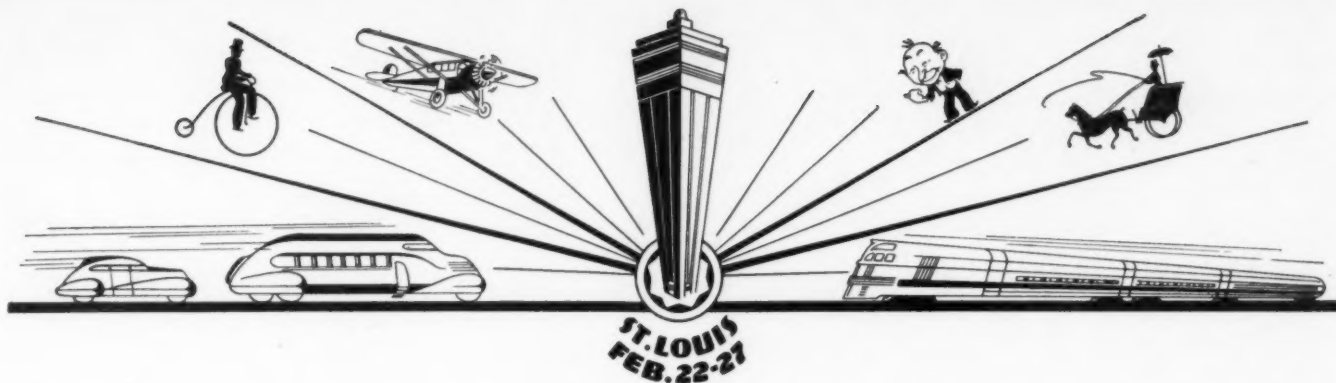
An occasional surface bath with this nonflammable cleanser will rejuvenate the fabric and not allow the dirt to become deeply imbedded.

To use this cleanser properly, first remove all top dust with a vacuum tool designed for such a purpose, or brush with a stiff brush. Cover with a cloth or a heavy paper the section of the furniture that does not require cleaning. Pour a small amount of carbon tetrachloride into a shallow dish, brush the soiled piece with even strokes and in straight lines, and wipe it off quickly with a cloth that does not shed lint. It may be necessary to repeat the process.

The use of an electric fan or a special attachment of the vacuum cleaner will aid in the drying process. If the nap or pile is flat when the material is dry, it may be brushed with a stiff brush.

When to Paint

When are weather conditions right for painting? The answer is any time when there is no excessive moisture present, when the temperature does not go below forty, or when, on the other hand, there is no torrid sun.



All Roads Lead To St. Louis

*Site of the 1936 N. E. A. Convention and
Home of Fred Medart Manufacturing Co.*

TO ALL CONVENTION DELEGATES:

Greetings:—

The opportunity of meeting our many school friends during the annual N. E. A. Convention—wherever held—is always keenly anticipated and enjoyed.

This year, however, the occasion has added import because we are permitted to welcome you to our home city.

As St. Louisans, we invite you to exercise those special privileges which any welcome guest may expect of a hospitable host. We urge you to use the several Medart Booths to the fullest extent. They are centrally located, spacious and ideally suited to serve as a rallying point and as a good place to obtain directions, civic data and local information. Throughout each day you will find Medart Headquarters a friendly haven where the cushioned chairs have been especially designed for weary conventionites.

A larger-than-usual staff of Medart representatives who qualify both as St. Louisans and as experts in School Equipment will be in attendance to greet you and to serve you.

Manufacturers of:

Steel Wardrobes

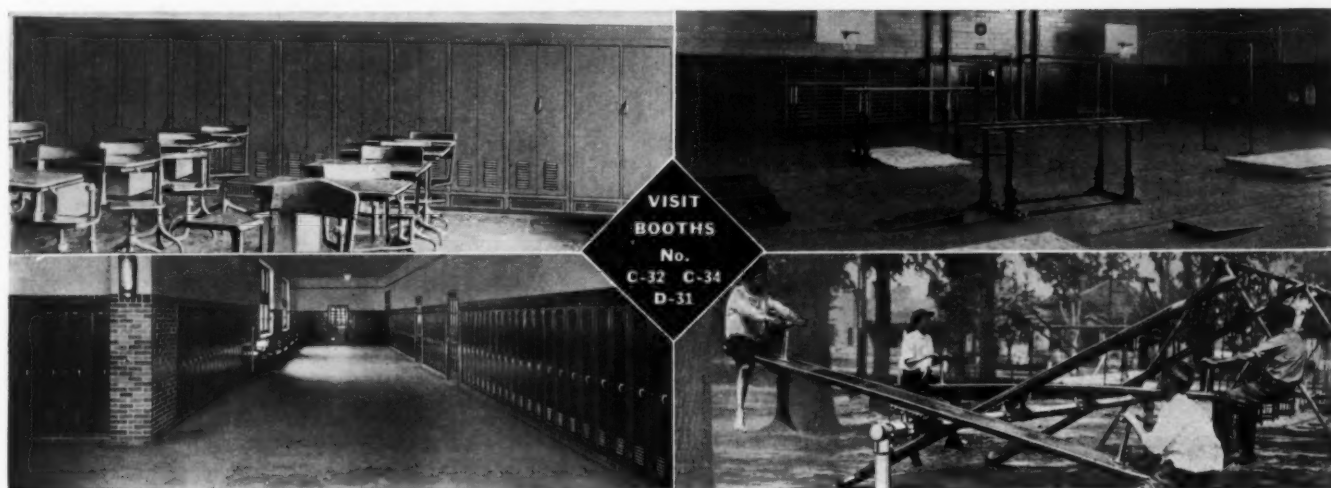
Steel Lockers

Gymnasium Apparatus

Playground Apparatus

Write for Catalogs

FRED MEDART MANUFACTURING CO.



Tempting Foods Offset Outside Competition

By HELEN VAN GILDER KASPER

HEALTH is regarded as one of the main objectives of education. The school cafeteria may assist in the realization of this most important objective by being a pleasant place to enjoy nutritious food at a nominal cost. This, of course, is the primary aim. It must also be conducted properly, so as to realize secondary aims, such as character, cooperation and manners.

A well nourished individual is likely to be happier and more contented than an undernourished one. Furthermore, there is often a direct relation between school efficiency and physical well-being. It is known that the nutritional needs of the adolescent differ from those of the parent. The pupil is growing. He needs protein for body building, and he needs more calories in proportion to his size than a grown person.

The school cafeteria has a chance to help build strong bodies by providing plenty of nourishing food. The importance of well prepared food, at a minimum cost, cannot be overestimated. In this way the cafeteria serves both the school and the home.

Freedom of Food Choice

The cafeteria in the Macfarland Junior High School is well patronized during the two lunch periods of forty-five minutes each. Particular care is taken to ventilate the dining room thoroughly during this time. Also, an earnest attempt is made to popularize healthful food. A freedom of choices, however, is given because it was found that pupils resent having particular foods prescribed to them even though they are desirable from a dietetic standpoint.

In a large city the school cafeteria has to compete with the street vendors as well as near-by lunch counters or the corner drug store. It seems far wiser to have the pupils lunch in school environment than in unsupervised places. Since this competition exists, it is essential that the school cafeteria offer more tempting food as well as a greater quantity than can be purchased near by for the same price, being consistent, of course, as far as possible with the idea of educating the pupil dietetically.

Home-Made Dishes Only

Everything sold in the Macfarland Junior High School cafeteria is, as far as possible, home-made. In this way we know exactly what the product we are offering for sale contains.

It is necessary that the pupil obtain a nourishing meal for 10 or 15 cents as this is the usual amount he has to spend. It is to be expected that children are tempted to spend part of this for candy or other sweets. For that reason candy and ice cream are sold in the cafeteria, otherwise the pupils would go to commercial places near the school in order to satisfy this desire, and, of course, would buy whatever lunch they could buy with remaining money at those places.

Soft drinks are not sold because they do not represent adequate food value for money expended. The fresh fruit punch that is made daily from oranges, lemons, grape juice and pineapple juice is well liked, and has had a consistently heavy sale even during the winter months. This has been successfully substituted for soft drinks. This punch is much more

desirable from a dietetic point of view. Fresh fruit cup is also well liked by most of the pupils.

The majority of foods sold in the cafeteria cost the pupil five cents each. The only two that cost more than five cents are the ten-cent balanced plate lunch and the ten-cent dish of chow mein. Chow mein is also sold in a five-cent portion, which has proved much more popular than the more expensive serving. The foods sold two for five cents or three cents each include home-made cup cakes, apples and oranges. Rolls are sold for two cents. Those for a cent include honey oatmeal cookies, bread and butter and some candies.

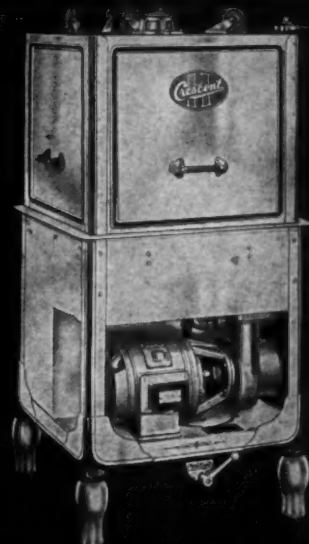
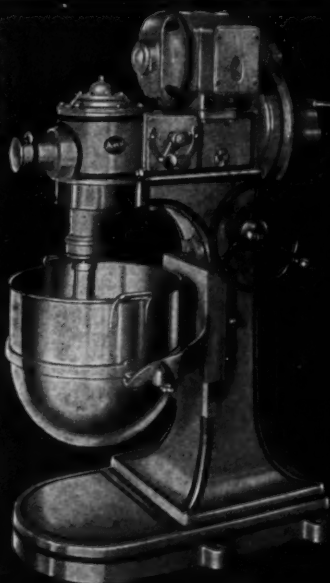
The sale of the ten-cent special, known as the balanced plate lunch, has increased 200 per cent during the year. The reason for this special is to make certain that the pupil will secure nourishing and properly selected food for ten cents since it is

To offset outside competition, a freedom of choice in foods is essential, according to Mrs. Kasper, dietitian, Macfarland Junior High School, Washington, D. C. The food, too, must be more tempting and served in larger quantities than can be purchased elsewhere for the same price. Candy, ice cream, home-made desserts and fresh fruit punch lend the necessary allure to keep the children inside the school at lunch hour.

HOBART *Electric Kitchen Machines*

HOBART GIVES MORE FOR THE DOLLAR

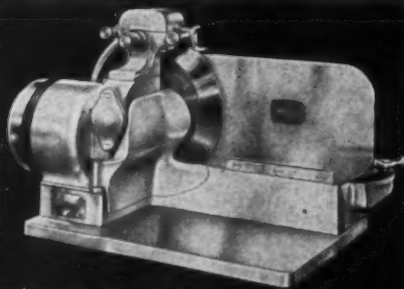
MIXERS Hobart-Built "from the ground up." New improved models, capacities from 10 Quarts to 110 Quarts. Beautiful new 80-Quart Model at low price. 12 Quart (left) shows famous Air Whip Attachment supplied for various models.



DISHWASHERS and GLASSWASHERS

HOBART-CRESCENT

The most complete line of up-to-the-minute equipment to match any kitchen's need exactly. See this new semi-automatic "AM-4"



SLICERS

New low-priced "Silver Flash" above. Hobart slicers measure costs—PRE-DETERMINE any thickness of slice (Meats, Bread, Cheese, Vegetables) and keep slices uniform.

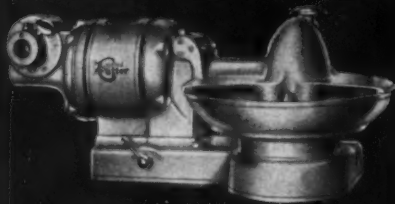
POTATO PEELERS

Stop that LOSS in hand peeling! Bench type Peeler shown. Also larger capacity floor models. Peel skin deep.



AIR WHIP

Better and more whipped cream at less cost. 3 Quarts or more from 1 Quart of liquid cream! Also Air Whip Attachment (see mixers above).



FOOD CUTTERS

Handle large quantities of Vegetables, Meats, Fruits, Nuts, in remarkably short time. Also operate wide line of practical, useful Attachments.

MORE INFORMATION

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Mixers | <input type="checkbox"/> Air Whip Attachment for Mixers |
| <input type="checkbox"/> Dishwashers | <input type="checkbox"/> Glasswashers |
| <input type="checkbox"/> Slicers | <input type="checkbox"/> Food Cutters |
| | <input type="checkbox"/> Air Whip Unit |

HOBART MFG. CO., Dept. H-82, Troy, Ohio.

Please mail detailed information, prices on machines checked.

NAME _____

STREET ADDRESS _____

CITY & STATE _____

assumed that one-third of the money will be spent for something sweet.

The balanced plate lunch consists of a meat or a meat substitute, and two vegetables, or one vegetable and a salad. The weight of the food on the plate averages about 15 ounces. In addition to the food featured on the plate lunch, an extra vegetable, sometimes two extra vegetables are available, so that the pupils may substitute these, if he chooses, without additional cost.

The plate lunch is served every day except Tuesday. Tuesday is known as "chow mein day." With this exception the pupils never know what foods are to be served on a particular day. This increases interest in the school lunch.

There is also a demand for a plate lunch on Tuesday. The chow mein is made in the school kitchen, but even then the cost makes it prohibitive to serve it with two other foods for ten cents. Every Tuesday a meat or a meat substitute is provided for those who do not take the chow mein. These dishes include creamed eggs and ham on toast, creamed meat on toast, and a hot beef sandwich. These dishes sell for five cents each.

No profit is made on the plate lunch. Sometimes the actual cost is more than ten cents. This deficit is made up on other foods sold. Many foods would be ideal to serve and would increase the variety given, but they are too expensive. From a managerial standpoint the increasing cost of food materials makes the problem of giving generous servings for five cents difficult. This is especially true of the plate lunch, which has three foods for ten cents.

All of the sandwiches were at first served on white, whole wheat and rye bread. Later a soft roll was used for the American cheese sandwich. The increased popularity of this sandwich was at once noticeable. Now soft rolls have replaced the bread almost entirely. Bread is used only in an emergency.

The soft rolls have increased the sandwich sales nearly 70 per cent, so the additional cost of the roll seems

MENUS FOR 10C PLATE LUNCHES DURING A THREE-WEEK PERIOD

1
Lamb stew
Browned potatoes Cabbage slaw
*Spinach *Buttered carrots
2
Creamed chipped beef on toast
Cabbage slaw String beans
*Fried apples
3
Swiss steak
Buttered carrots Escalloped potatoes
*Lima beans
4
Baked beans
Pineapple salad *Spinach
Corn muffin and butter
5
Baked cod with tomato sauce
Green string beans Mashed potatoes
6
Tuna à la king in patty shells
Candied sweet potatoes Spinach
7
Salisbury steak
Mashed potatoes Buttered beets
8
Beef and vegetable stew
Graham muffin with butter
Apple salad *Kale
9
Macaroni and cheese
Fried apples Harvard beets
*Buttered carrots
10
Fresh pork Apple sauce
Mashed potatoes *Sauerkraut
11
Spaghetti with cheese, tomato sauce
Creamed peas
Cabbage and pineapple salad
12
Roast beef and brown gravy
Buttered beets Mashed potatoes
*Lima beans
13
Baked ham
Cabbage and pineapple salad
Candied sweet potatoes
*Green cabbage
14
Meat and vegetable pie
Creamed cauliflower Sweet relish
*String beans
15
Fillet of haddock
Harvard beets Mashed potatoes
*Escalloped tomatoes

*The extra vegetable may be substituted for one featured without extra cost.

a justified expenditure. Egg salad, tomato and lettuce, relish and lettuce, tuna salad and ham are the most popular sandwiches.

Through experimentation it has been found that the majority of pupils are reluctant to try unfamiliar salads or desserts. They prefer the common desserts of custard, butter-scotch or chocolate pudding and gelatine to prune or apricot whip, upside down cake, cottage pudding or fruit and rice desserts. They hesitate to spend their money for something that they are not positive they are going to enjoy.

During the winter months vitamin D milk is substituted for the regular type to balance the lack of sunshine during these months.

Perhaps one of the chief reasons it has been possible to serve so much for the price charged is that the mayonnaise is made, the beans are cooked and the soups are prepared in our kitchen as well as the cake and pie sold. These procedures help reduce the operating cost.

Since the cafeteria is maintained on a nonprofit basis any money accumulated is later given back to the pupils. This may take the form of a special vegetable, a more expensive protein dish or necessary equipment.

All supplies for the cafeteria are purchased wholesale. For the larger needs competitive bidding is used among selected merchants. Perishable products, like fresh meats and fresh fruits and vegetables, are never purchased by contract.

In a well managed and a well organized cafeteria practically no food is wasted. Waste often indicates a loosely managed organization. Then, too, the operating expenses are increased by this lack of planning which is so essential if the balance sheet of the cafeteria is to be written in black rather than red. The successful junior high school cafeteria like any adjunct must be properly handled from the standpoint of adolescent psychology, nutrition and management. It must also have the cooperation and interest of the entire school organization.

Western Electric presents
the **NEW** Program Sound System
for schools!

...with many revolutionary features

**Smaller and better!
Lower priced! It's what you
have been waiting for!**

Western Electric's new sound distributing equipment marks the most important advance in years. Engineered by Bell Telephone Laboratories, it does all that previous large, costly systems did—and more too—yet costs far less. This latest Western Electric achievement is the ideal sound equipment for your school!

*For bulletin giving full details, write
Graybar Electric, Graybar Building, New York*



Western Electric

Distributed by GRAYBAR Electric Co. In Canada: Northern Electric Co., Ltd.

PROGRAM DISTRIBUTION AND PUBLIC ADDRESS SYSTEMS

Parents Check School Menus

By Mrs. RUTH UNDERWOOD

COOPERATION of the parents in assuring children of school age nutritive and appetizing dishes at low cost is constantly solicited by the School Lunch Department, Falmouth, Mass. Particularly in catering to youngsters of grammar school age is the help of mothers sought in selecting certain foods for their children. The dietitian and her assistants pledge themselves to carry out, as far as possible, any suggestions made.

Every Friday the menu for the following week is given to each child to take home. A letter of explanation signed by the dietitian accompanies it. "If this is your daughter's first year in school," this reads, "you

may check your choice, return the menu with the money for the lunches on Monday, and we will try to see that she eats the food you want her to.

"When you send the money, put it in an envelope or paper, and write on it the amount you wish to spend. We will then give her the change, if any, to take home. If a child has been absent during the week the money not used will be credited to her account for the next week or returned to you if you ask for it.

"Each article of food for Village Grammar School children is five cents. Three articles a day would cost 15c, or 75c a week. A child who

brings lunch from home may bring 25c on Monday and have a milk ticket, which will make it possible for her to have one article—milk, soup, hot dish or dessert (as you wish) every day for a week. Weekly tickets are so much easier to take care of, both for the children and for us, that we hope those who buy lunches regularly will pay by the week.

"The menu sent home will list the daily changes. In addition to this, every day we serve the following:

Vitamin D milk, chocolate milk, orange juice, fresh fruit, peanut butter sandwiches, jam sandwiches, a hot vegetable with a slice of bread and butter, gelatine dessert, cookies, animal crackers and ice cream.

"We hope you will be pleased with the way your children are cared for at noon, and when possible that you will come and visit the cafeteria and see for yourself this very interesting department of the school."

As this letter indicates, all food served the smaller children, that is, below junior or high school age, is sold for five cents. In the junior high and senior high, the children pay ten cents for a hot dish—a larger serving than the five cent one given the smaller children.


Cultivating Good Food Habits

The most effective way to sell wholesome food in the school cafeteria, according to Mae D. Paige, director of school cafeterias, West Hartford, Conn., is to sell healthful foods such as milk, vegetables, fruits and salads below cost. It is never necessary, states Miss Paige, to promote the sale of desserts, meats or sandwiches because the pupils have a natural appetite for these items. If it is found necessary to make up the loss on the former articles, the desserts, meats and sandwiches may be sold at a slight profit. It is the duty of the cafeteria manager to eliminate as far as possible undesirable foods such as hot dogs, pie, pickles and hamburgers. By serving appetizing food in a most attractive manner, the pupils can be taught to select the more wholesome dishes.

TYPICAL WEEKLY MENUS AT FALMOUTH SCHOOL CAFETERIAS

	Soup	Hot Dish	Salad	Sandwich	Desserts
Monday	Corn chowder	Cream dried beef, Baked potato	Apple, grapes and carrot	Sliced ham	Fruit gelatine Choc. pudding
Tuesday	Clear tomato with rice	Corned beef hash	Pear in lime gelatine	Tuna and celery	Steamed plum pudding Banana custard
Wednesday	Vegetable	Creamed chicken on toast	Crab and celery	Lettuce or sliced cheese	Prune and nut gelatine Butterscotch pudding
Thursday	Lamb stew	Sliced spiced ham and vegetable salad	Orange, banana and pineapple	Raisin, date and nut	Pineapple delight Chocolate flake custard Coffee jelly
Friday	Fish chowder	Italian spaghetti	Roosevelt (vegetable)	Cream cheese and olive	Cherry cobbler Orange whip
Monday	Cream of tomato	Salmon wiggle	Apple, celery and nut	Lettuce	Baked apples Chocolate flake custard
Tuesday	Cream of celery	Hot roast beef sandwich	Orange and pear	Sliced cheese	Brown Betty Tapioca cream
Wednesday	Corn chowder	Creamed eggs, Mashed potato	Tomato	Bacon and cream cheese	Baked custard Pineapple delight
Thursday	Vegetable-beef	Hot dogs	Fruit	Chicken and celery	Apple cobbler Choc. pudding
Friday	Quahog	Tomato rabbit	Orange, banana and apple	Egg	Fruit gelatine Chocolate nut bread Prune whip

These menus are given each child to take home for the following week. Parents are urged to check dishes they want their children to have.



This attractive corridor in the Champaign Junior High School, Champaign, Ill., is Armstrong's No. 12 Taupe Jasper— $\frac{1}{8}$ " gauge. 2700 sq. yds. of Armstrong's Linoleum were used for floors throughout the school.

Pounding Feet can't hurt this floor!

*... that's why more and more schools are
using Armstrong's Linoleum Floors*

SCHOOLS have to buy flooring with an "eye to the future." Their budgets require floors that will last for years, even under extra hard wear and tear.

That's why so many schools today use Armstrong's Linoleum Floors. They're durable and tough. With a minimum of attention, they'll provide years of satisfactory service. And they're quiet and resilient. They deaden the noise of scuffling feet and scraping fur-

niture... provide real underfoot comfort. Important, too, is the fact that Armstrong's Linoleum Floors are inexpensive to install.

If you're considering a new floor for your school, get all the facts about Armstrong's Linoleum. Write now for "Public Floors of Enduring Beauty." Armstrong Cork Products Company, Floor Division, 1213 State Street, Lancaster, Pa.



Armstrong's LINOLEUM FLOORS

Also LINOTILE ~ CORK TILE ~ ACCOTILE ~ RUBBER TILE ~ LINOWALL ~ CORKOUSTIC

NEWS IN REVIEW

Program of Department of Superintendence Meeting Has Features of Unusual Interest

By ALEXANDER J. STODDARD

The construction of the program for the annual convention of the Department of Superintendence is always a complicated process, involving careful study of the educational scene and constant planning throughout most of the year. The meeting in St. Louis during the last week in February, 1936, comes at a critical time in the history of public education in America. The next five years possibly will reveal the course of education for this generation.

Dominant Convention Theme

If any one theme has dominated thus far the construction of the program for 1936 it probably has been "Next Steps in Educational Progress." Many of the addresses will reflect that subject. For instance, John W. Studebaker, U. S. commissioner of education, will discuss the rôle that the federal government should assume in reference to education; Thomas H. Briggs, Teachers College, Columbia University, will speak on the subject, "Issues of Secondary Education"; A. G. Crane, president of the University of Wyoming, in his address "America Must Choose" will direct attention to the educational implications of that powerful device, the radio; Agnes Samuelson, president of the National Education Association and state superintendent of public instruction in Iowa, will discuss the double educational standard in our nation in her address, "Rural Education and National Welfare"; George D. Strayer, Teachers College, Columbia University, will challenge the profession with, "The Promise of Democracy and the Performance of the Politicians."

One of the most important issues confronting education in America is that of federal aid. Realizing that the time has arrived for a thorough consideration of this subject, four of our country's foremost educators have been invited to discuss it at an evening general session.

These speakers are: Lotus D. Coffman, president of the University of Minnesota; Charles H. Judd, chairman of the department of education, University of Chicago; Paul R. Mort, pro-

fessor of education, Teachers College, Columbia University, and Payson Smith, former state commissioner of education, Boston.

Many of those attending the annual convention of the Department of Superintendence have come to regard the smaller group discussion meetings held on Monday and Wednesday afternoons as among the most interesting and profitable features of the whole program. This is especially true of superintendents of schools, who look to these meetings for a practical discussion of their everyday problems. Thirty-six group meetings have been arranged for Monday afternoon, and a similar number for Wednesday afternoon.

On Monday afternoon, the programs will be cast as directed group debates, and the subjects will be specific controversial issues. On Wednesday afternoon, the programs will be cast as directed group discussions, and the subjects, although they may involve conflicting points of view, will be broader and less confined to a particular issue. There will be nine major divisions each afternoon. These will meet in four groups each.

Division Leaders

The divisions and leaders for Monday afternoon are as follows:

Administration: Will French, superintendent of schools, Long Beach, Calif.

Supervision: Zenos E. Scott, president, State Teachers College, Bridgewater, Mass.

Finance: Alfred D. Simpson, assistant commissioner for finance, State Education Department, Albany, N. Y.

Organization: Homer W. Anderson, superintendent of schools, Omaha, Neb.

Buildings and Equipment: N. L. Engelhardt, Teachers College, Columbia University, New York City.

Methods: W. C. McGinnis, superintendent of schools, Perth Amboy, N. J.

Teaching Personnel: Worth McClure, superintendent of schools, Seattle, Wash.

Curriculum: Sidney B. Hall, state superintendent of public instruction, Richmond, Va.

Lay Relations: Charles A. Lee, professor of education, Washington University, St. Louis.

The outline for Wednesday afternoon is as follows:

Childhood Education: George D. Stoddard, State University of Iowa, Iowa City.

Elementary Schools: Bess Goodykoontz, assistant U. S. commissioner of education, Washington, D. C.

Junior High School: James M. Spinning, superintendent of schools, Rochester, N. Y.

Senior High School: Harrison C. Lyseth, state supervisor of secondary education, Augusta, Me.

Adult Education: James A. Moyer, director, division of university extension, State Department of Education, Boston.

Postgraduate and Junior College: Francis L. Bacon, superintendent, Evanston Township High School, Evanston, Ill.

Education of Out-of-School Youth: Richard D. Allen, assistant superintendent of schools, Providence, R. I.

Teacher Training: William H. Morton, director of teacher training, University of Nebraska, Lincoln.

Rural Education: Sue M. Powers, county superintendent of schools, Memphis, Tenn.

Yearbook Discussions

The theme of the 1936 Yearbook, to be distributed at the St. Louis convention, is "The Social Studies Curriculum." Probably this yearbook will rank as one of the most valuable and significant contributions ever made by the Department of Superintendence to education in America. Ample opportunity will be given at the convention to discuss the issues involved.

Consideration of the yearbook will open with an address on Tuesday morning, February 25, by Dr. Charles A. Beard, historian and political scientist, on the topic, "The Scholar in the Midst of Conflicts." After that, the Yearbook Commission, including Doctor Beard, is to present, in panel-discussion form, the significant features of the yearbook itself. Two superintendents of schools, not members of the commission, have been invited to participate in the discussion, one at either end of the panel. It is the understanding that these two superintendents shall represent the audience and the public in a spirit of appraisal. The panel will be as follows:

Yearbook Commission Members: Charles B. Glenn, superintendent of schools, Birmingham, Ala., chairman; Charles A. Beard, New Milford, Conn.;

(Continued on page 70)

Cit Last! A SOAP SYSTEM THAT ACTUALLY *Invites* CLEANLINESS

Palmolive "Measured Soap" is a delight to students—a tremendous saving for you

AS Mark Twain said, "Everyone talks about the weather but no one does anything about it." And it's much the same with cleanliness and school children. There is a lot of talk about it, but actually how much incentive for healthful cleanliness do your present washing facilities offer?

With Palmolive "Measured Soap" it's different. Here is a new, modern *dry* soap system that actually encourages clean hands and faces . . . yet *costs less than 1/100 of a cent per wash*.

The gleaming chromium and glass Palmolive "Measured Soap" dispenser is a marvel of efficiency. It never leaks, cakes, corrodes, or gets out of order. And it can't be drained. It automatically measures out exactly enough soap for one good washing at a time . . . and no more.

The soap is Palmolive

And the soap is *Palmolive* in a special form that breaks into rich, luxurious lather the minute it touches water. It gives thorough, deep-pore cleansing action, yet, at the same time, assures the same gentle skin care that has made Palmolive the largest selling toilet soap in the world.

A 30% to 40% saving

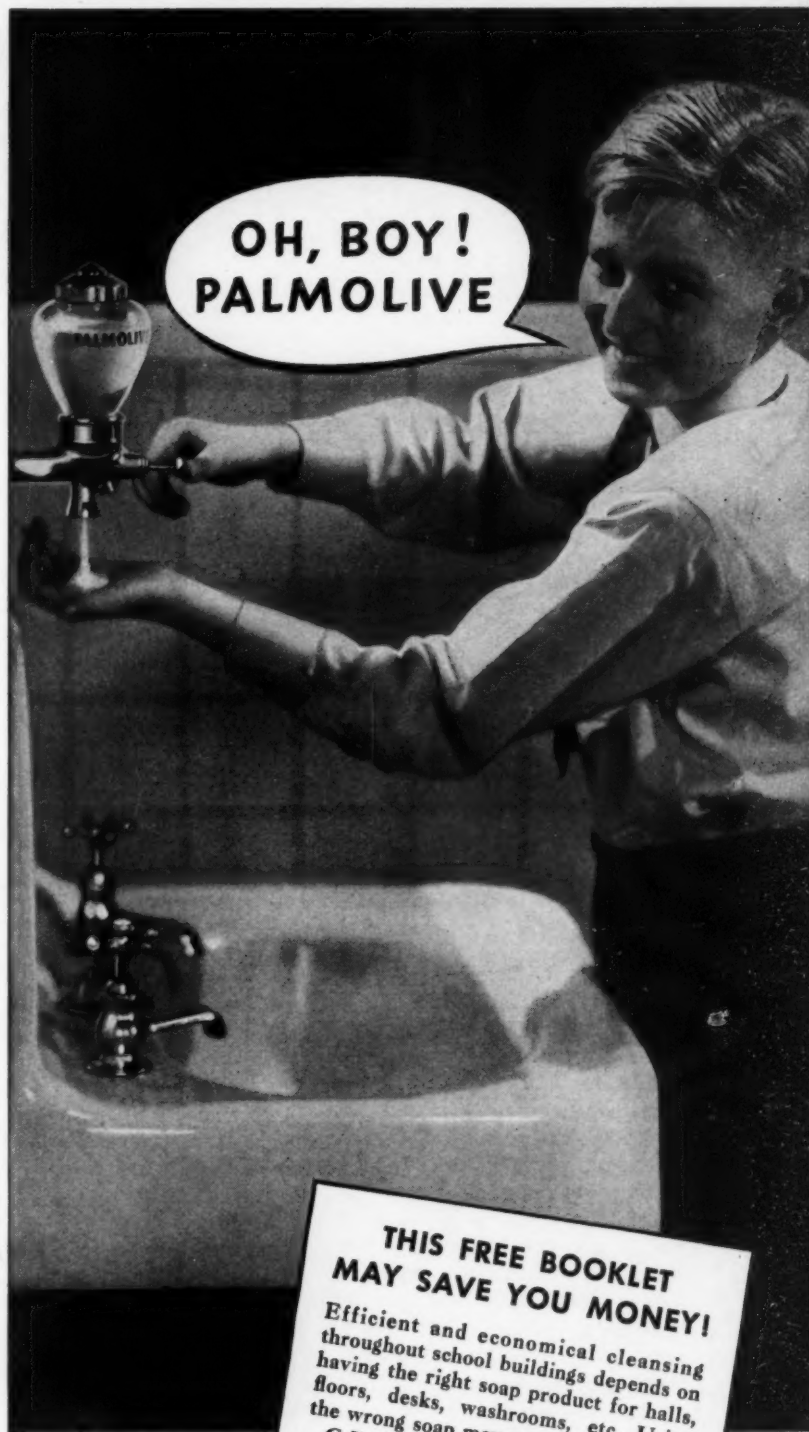
Besides what it does to promote the cleanliness habit among your students, Palmolive "Measured Soap" cuts soap costs from 30% to 40%. It provides 100 washings for 1¢. And you'll find it saves service time, too . . . the big reservoir holds enough Palmolive Soap for 300 full-size washings.

With all the advantages that Palmolive "Measured Soap" offers—healthful cleanliness, foolproof service, substantial savings—don't you think it merits a thorough investigation? Write us today for full particulars. No obligation, of course.

PALMOLIVE *"Measured Soap"*

THE NEW, ECONOMICAL DRY SOAP SYSTEM

Colgate-Palmolive-Peet Co., Jersey City, N. J.



THIS FREE BOOKLET MAY SAVE YOU MONEY!

Efficient and economical cleansing throughout school buildings depends on having the right soap product for halls, floors, desks, washrooms, etc. Using the wrong soap may prove costly. C.P.P. Consulting Service places at your disposal a staff of experts to aid you in choosing the right soap and cleansing method for every need. Avail yourself of this valuable free service. "School Cleanliness Problems"—this free booklet is another valuable guide to economical cleansing. It's yours absolutely free. Send for a copy, today.

Superintendents' Program Is of Unusual Interest

(Continued from page 68)

Herbert B. Bruner, Teachers College, Columbia University; Leslie A. Butler, superintendent of schools, Grand Rapids, Mich.; George S. Counts, Teachers College, Columbia University; Frank N. Freeman, professor of education, University of Chicago; Leonard V. Koos, professor of secondary education, University of Chicago; Paul T. Rankin, supervising director of instruction, board of education, Detroit; Virgil Stinebaugh, director of junior high schools and curriculum revision, Indianapolis; Ralph W. Tyler, bureau of education research, Ohio State University, and Howard E. Wilson, Harvard.

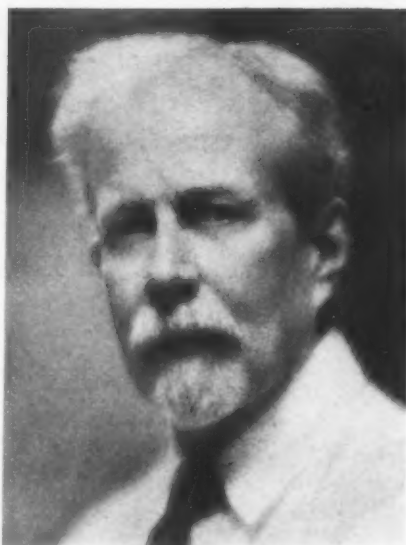
Representatives of the Audience: Frederick H. Bair, superintendent of schools, Shaker Heights, Ohio, and Worcester Warren, superintendent of schools, Bridgeport, Conn.

The program for the general session Wednesday morning will be unique. Dr. Roy W. Hatch of the Upper Montclair State Teachers College will actually teach a class of high school seniors on the platform of the arena on some subject involving current social problems. With the aid of microphones, the audience will hear all contributions by the class and by the teacher. At the close of the teaching period, Supt. Louis P. Benezet of Manchester, N. H., will appraise what has been done from the standpoint of the profession, and Rabbi Abba Hillel Silver of Cleveland will appraise it from the standpoint of the public. After both have spoken, Doctor Hatch will summarize the whole project.

Deans of Women to Hear Both Youth and Experience

"Cooperation With Youth" is the theme that will draw deans of women to St. Louis for the twentieth annual meeting of the National Association of Deans of Women, to be held at the Hotel Statler, February 18 to 22, preceding the meeting of the Department of Superintendence. At the first morning session youth, in the person of a college senior and a graduate student, will present its case and a dean of women will accept the challenge.

Dr. Marie Bentivoglio, professor of geography, University of Australia, will speak at the banquet, which will be followed by a joint reception for personnel groups. Forums and seminars are being arranged and several joint sessions will be held with the American Council of Guidance and Personnel Association.



Lorado Taft to Receive Annual Exhibitors' Award

Lorado Taft will be the recipient of the 1936 American Education Award made annually by the Associated Exhibitors at the Department of Superintendence meeting.

The presentation will be made at a banquet to be held at the Jefferson Hotel in St. Louis on February 25, according to President Paul Crabtree.

Lorado Taft, the sculptor, is known throughout the educational systems of the world for his contributions to art education and particularly for the inspiration he has been through his books and lectures to those who teach art.

Visual Instruction Group Will Meet at St. Louis

The department of visual instruction of the National Education Association has announced a two-day program to be held concurrently with the meeting of the Department of Superintendence in St. Louis.

On Monday, February 24, an afternoon session at the St. Louis Educational Museum will be devoted to demonstration lessons using visual aids with classes of pupils from lower grades, intermediate grades and high schools. Following this, Arthur C. Pillsbury, Berkeley, Calif., will present his remarkable motion pictures on biologic, horticultural and floral subjects. Other speakers are Herbert J. Stack, Columbia University; William A. Yeager, University of Pittsburgh; Arthur O. Baker, John Marshall High School, Cleveland; Edwin A. Krows, producer and editor, and Edgar Dale, Ohio State University.

There will also be a symposium on "Sound and Silent Films in Teaching."

Program Arranged for Building Problems Group

Among meetings to be held in St. Louis this month is the seventh annual conference of the National Advisory Council on School Building Problems on Wednesday, February 26, at the Hotel Jefferson, with Dr. Arthur B. Moehlman, the president, in the chair.

Topics and speakers for the morning meeting include the following: "The Relation of the School Building Survey to the Reorganization of Schools Into Larger Administrative Units—The Story of One County" by Alice Barrows, specialist in school building problems, U. S. Office of Education; "Educational Planning in Relation to State and National Planning," by Earl Hanson, planning consultant, National Resources Committee, U. S. Department of the Interior, and "Social Changes Affecting Occupational Opportunities for Youth—How Will This Affect School Building Estimates?" by A. F. Hinrichs, chief economist, Bureau of Labor Statistics, U. S. Department of Labor.

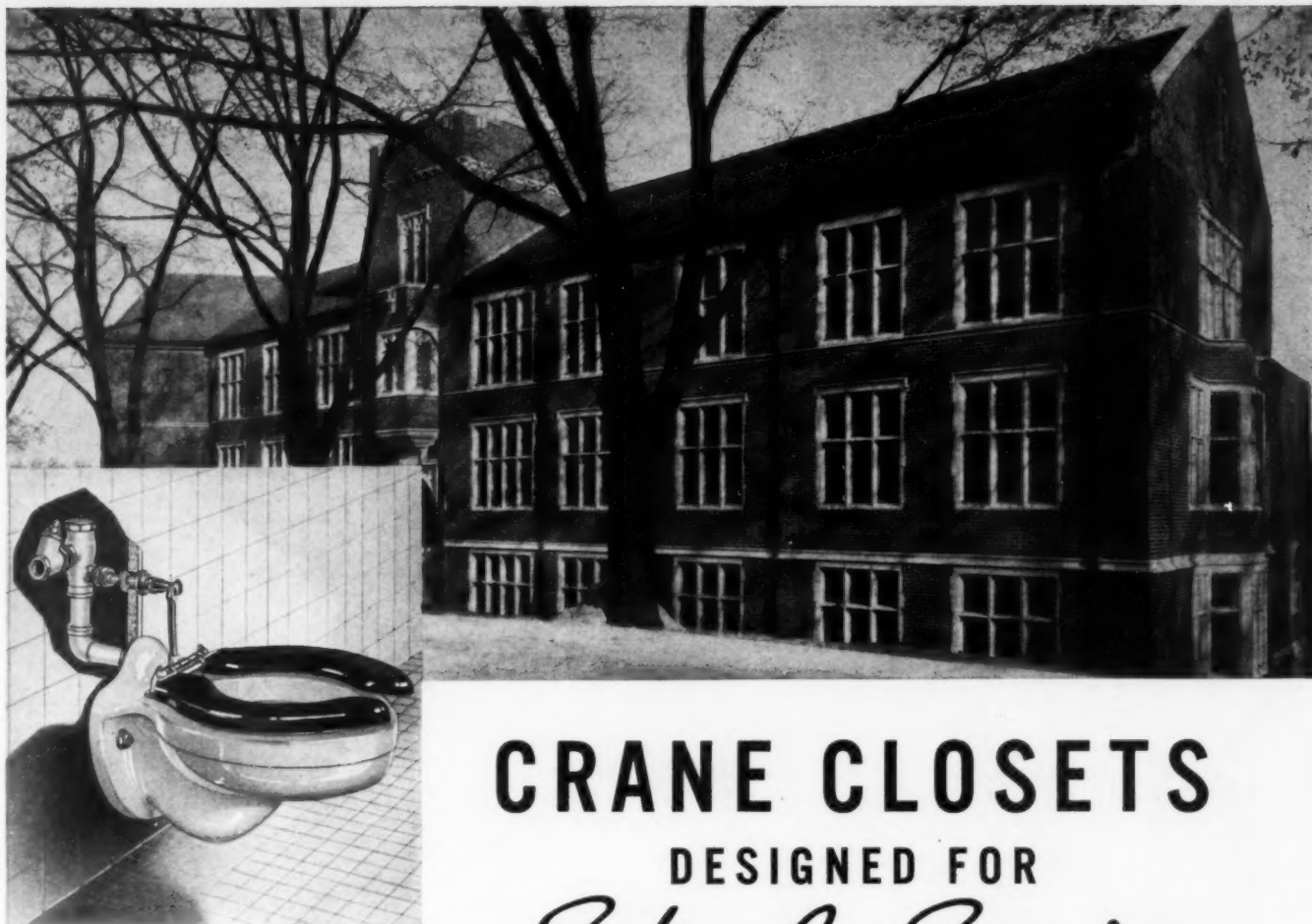
In the afternoon Dr. H. F. Alves, specialist in state school administration, will discuss the Office of Education funds for states to study local school units. Doctor Moehlman, the president, and Dr. John W. Studebaker, commissioner of education, will present a proposal for a cooperative study of school buildings needs—1936-1937.

Five-minute reports from the field on school building surveys and programs will be made during the morning and at the luncheon meetings by the following: Dr. HuBert C. Eicher, Pennsylvania; H. W. Schmidt, Wisconsin; W. F. Credle, North Carolina; L. V. Cavins, West Virginia; J. A. Keller, Alabama; Charles W. Bursch, California; Inez J. Lewis, Colorado; J. L. Graham, Florida.

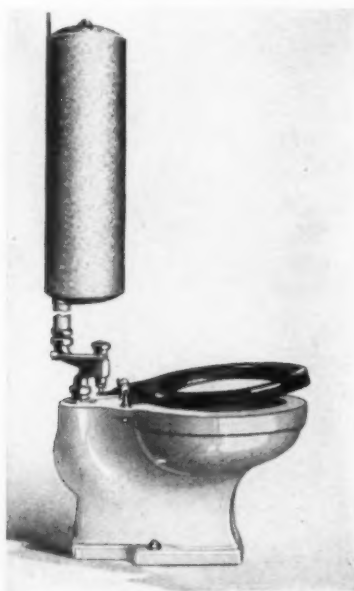
J. W. Brooker, Kentucky; Paul Gunderson Rockwell, Minnesota; W. G. Eckles, Mississippi; N. E. Viles, Missouri; T. C. Holy, Ohio; S. P. Clemons, South Carolina; I. D. Weeks, South Dakota; L. A. Woods, Texas; Charles H. Skidmore, Utah; Raymond V. Long, Virginia; N. D. Showalter, Washington, and S. L. Smith, Julius Rosenwald Fund.

Directors of Publicity to Meet

Directors of publicity for city and county schools, state departments of education, state education associations, local teachers associations and teachers colleges will meet at St. Louis in connection with the sixty-sixth annual convention of the Department of Superintendence for the purpose of creating an organization.



The Crane LOWALL closet for compact installation, hygienic posture, vigorous seat-operated flushing action.



The Crane SANTON automatic seat-operated pressure valve closet combination for small supply lines.

CRANE CLOSETS

DESIGNED FOR

School Service

Crane plumbing fixtures for Schools are designed to fit a maximum number of different installation problems—to allow the architectural engineer maximum flexibility in layout while assuring a perfect plumbing job.

The Crane LOWALL closet, with its twin siphon jets, short vigorous flushing action, and neat compact design is typical of Crane closets for school service. A wall type closet, its rim is only *thirteen inches* off the floor. This extends its use to lower grades and provides for the most hygienic posture. Equipped with seat-operated direct flushing valve.

Where supply pipes are small, schools may still enjoy the advantages of seat operated flushing valve action by the use of the SANTON full siphon jet closet equipped with pressure tank which delivers a generous water supply to the closet.

Whatever your plumbing problem, Crane Co. already has or will find the answer whether it concerns closets, showers, fountains, lavatories or other types of sanitary equipment.

CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO, ILLINOIS · NEW YORK: 23 W. 44TH STREET

Branches and Sales Offices in One Hundred and Sixty Cities

P L U M B I N G A N D H E A T I N G M A T E R I A L S

PRIVATE SCHOOLS • • • • •

Plant Changes at Wilbraham Academy Prove Popular

Changes made in the school plant at Wilbraham Academy, Wilbraham, Mass., during the past summer have contributed greatly to the life of the institution during the fall term. A portion of the basement of the gymnasium building is now a spacious and well equipped spa where the boys may go during their leisure moments for a light lunch, a smoke or a game of pool or ping pong.

Benefits have likewise accrued to the faculty as a result of these changes. A room on the first floor of Rich Hall has been furnished to serve as a club room and meeting place for faculty members where they may gather to discuss mutual problems or to enjoy a cup of coffee.

Gulick Appointed Proctor Head

J. Halsey Gulick has been appointed head master of Proctor Academy, Andover, N. H., according to an announcement made by Philip P. Sharples, president of the board of trustees. Mr. Gulick, at one time a member of the physical education department at Lehigh and Princeton Universities, and more recently a teacher at the Fessenden School in West Newton, Mass., and the Mary C. Wheeler Town and Country School at Providence, R. I., is president of the New England Association of Camp Directors and director of the three Luther Gulick camps at South Casco, Me.

New Home for Daycroft School

A twenty-eight-room Tudor style house surrounded by twelve acres of lawns and woodlands has been purchased by Mrs. Paul H. Smart from the Hoyt estate on Noroton Hill, Stamford, Conn., to be used as the new home of the Daycroft School, at present conducted in an English style brick village erected some years ago on her estate at Noroton.

Evenings at Warrenton Social

Pupils at Warrenton Country School, Warrenton, Va., do none of their studying in the evening hours. Lessons are all prepared before dinner, after which the girls gather in small groups in the living rooms of the different cottages where they read, sew, or take part in the different club activities which the school offers, according to Mrs. T. L. Fitch, assistant principal.

Chaucer Mural to Hang in Morgan Park Library

They are making the springtime pilgrimage to the shrine of Thomas à Becket at Canterbury, and they have rested for a few moments on the walls of the library at Morgan Park Military Academy, Morgan Park, Ill.

All of the story tellers are there, the nuns, the Clerks of Oxford, the Yeoman, the Maunciple, the Miller, the Young Squire, the fat Monk, the Wife of Bath,

the Cook, the Summoner, the Franklyn, the Pardoner, the Jolly Friar, the Merchant, the Doctor of Physik, the Parson, the Plowman, the Knight, the Lawyer, the Sailor, the Reeve and Chaucer himself, the host.

The mural, 15 by 6 feet, has been painted by Howard Church of the Art Institute of Chicago, in what he describes as a "conservative modern key," that is, true to the sturdy, simple, strong types portrayed by Chaucer. The group is resting under a large tree, and the background is the rolling farmlands and pastures of Kent. The painting was on view to the public at the school from December 15 to January 15.

Winter Repairs at Kemper

When the boys returned to Kemper Military School, Boonville, Mo., following the Christmas vacation they found that "C" barracks had been thoroughly renovated. All the radiators had been replaced with new equipment, bringing the heating facilities in this section of the barracks up to standard. Plans are now being considered for the rehabilitation of "A" barracks during the summer months so that the cadets in the band will have living quarters equivalent to or better than those now enjoyed in the other buildings. It is likely that the school will replace the closets and tables in "A" barracks with study desks and cabinets.

Former School Head Dies

Charles H. Leete, former head master of the Leete School for Girls in New York City, died at the age of 78. This school, now known as Highland Manor School for Girls, is in Tarrytown, N. Y.

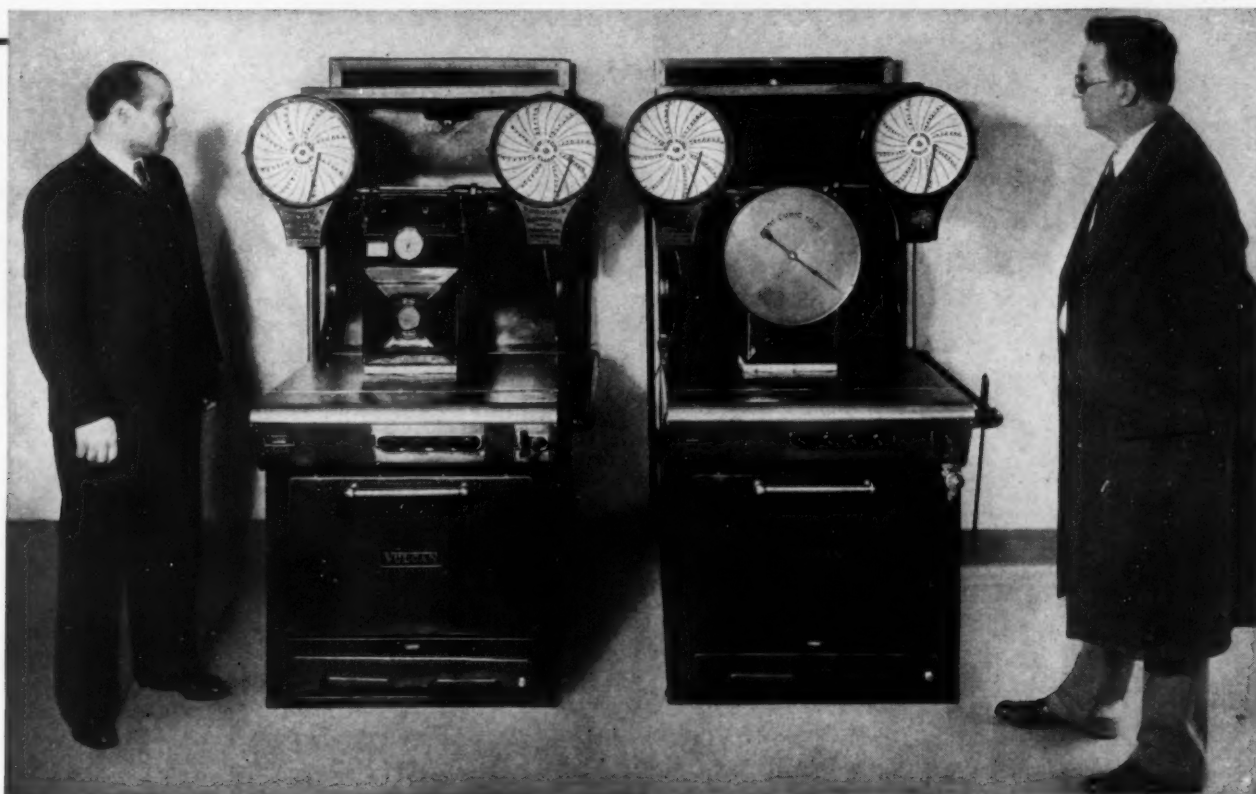


Copyright by Howard Church

Story tellers all, the famous characters of Chaucer's "Canterbury Tales" adorn the library walls of the Morgan Park Military Academy, Chicago, in this mural by Howard Church.

DON'T GO ON WASTING MONEY!

*Here's proof of 38.7% saving on gas
under actual service conditions*



THE TEST Two Vulcan ranges, both same type, one insulated and equipped with thermostatic temperature oven control and the other without.

Two roasts of identical weight and quality. One roasted in each oven at the same time by a hotel chef.

RESULTS The range with insulation, and heat

control used 38.7% less gas. Also, its outer wall was 70° cooler than the wall of the other range.

This type range can also be equipped with top temperature control.

Investigate now and let us prove that substantial savings and more satisfactory results will be effected by the use of this new type equipment. It will pay for itself in a short time.

STANDARD GAS EQUIPMENT CORPORATION, 18 East 41st Street, New York, N. Y.

VULCAN

**COST-CUTTING EQUIPMENT MAKES
GAS THE MODERN EFFICIENCY FUEL!**

INVESTIGATE!

Hotel Department, Standard Gas Equipment Corporation
18 East 41st Street, New York, N. Y.

Please send me complete information about Vulcan
Equipment

NAME

ADDRESS

CITY

STATE

TYPE OF ESTABLISHMENT

REGIONAL NEWS

Eastern States

NEW JERSEY

Chatham.—The board of education has \$65.93 on deposit in the Summit Trust Co. and doesn't know what to do with it. The amount represents a subscription by school children of the town during the World War to a second liberty loan 4 per cent bond for fifty dollars, with accrued interest.

NEW YORK

Chester.—School district voters approved an additional bond issue of \$31,000 to finance the proposed school structure when all bids for the job exceeded the amount estimated.

PENNSYLVANIA

Brockway.—The Snyder Township school district has dissolved its rural grade divisions. Now a pupil is placed for each subject in the grade equal to his ability: a seventh grade pupil may be in a fourth grade reading class. The block system of teaching is employed.

Hughesville.—The borough schools are consolidating all school records into a uniform, standard reference system, which will place all pupil records into immediate reference procedure, necessary in the guidance program.

Lancaster.—The city council voted to vacate immediately those streets and alleys laid out in the city plan which cut through the site of the new school. The school board will build a pedestrian pavement across the campus.

Philadelphia.—Drexel Institute received the residuary estate of the late Lillie Bell Randell, amounting with principal and interest to a little more than \$425,000.

Philipsburg.—Replacing the junior-senior high school building, which was destroyed by fire on Thanksgiving Day in 1934, will be a \$210,000 brick structure with accommodations for 800 pupils.

Swatara Station.—Secretarial training is a new course now being offered in the township high school. In order to present the course, it was necessary to give one period of typewriting in the second year and transfer commercial arithmetic from the fourth year to the third. Each senior enrolled in the course is appointed secretary to a teacher.

Middle Western States

ILLINOIS

Wilmette.—A safety education program, to be carried out by the schools in cooperation with the police force, has been

initiated in New Trier Township. Tentative outlines of the course of instruction provide that pupils in the lower grades will make posters for use in the schools and to display in stores and other places. The sixth, seventh and eighth grades pupils will write safety themes and some will be assigned to talk of safety to the lower grades. The program is to include all branches of safety measures for the road, the schools and the home.

INDIANA

Indianapolis.—All high school pupils in the state are to be required to take a course of twenty lessons on safe auto driving under plans announced by Floyd I. McMurray, state superintendent of public instruction. The course is being prepared by Purdue University and will be presented as a part of the present course on health education. Teacher training schools are also to offer the course, which will be a requirement toward a teaching license.

IOWA

Delaware County.—Guidance programs are being organized in the high schools on the basis of home rooms. Each pupil is identified with a given teacher who in turn is responsible for the personality and character development of a group of pupils.

Des Moines.—More than 125 high schools have written their histories and sent them to Everett Davis, state chairman of the tercentenary celebration of secondary education. These will be bound together and placed on file.

Gravity.—The parent-teacher association paid for new stage equipment for the school auditorium here.

Iowa City.—The State University of Iowa will open its new \$100,000 theater for a play to be given in May, according to tentative plans announced by Prof. E. C. Mabie, head of the department of speech and dramatic art. The theater seats 500 persons and the equipment now being installed is being financed by a grant of \$25,000 from the Rockefeller Foundation.

Linn Grove.—An improvement honor roll has been designed to appeal to pupils in the lower half of their class by H. O. Petersen, superintendent.

Scranton.—Members of the junior and senior class have been offered as speakers to local clubs by C. C. Anama, superintendent of schools, in his plan for making high school public speaking courses more practical.

Stanhope.—Five new busses, of all-steel construction and a capacity of from thirty to thirty-five pupils each, started service with the new school year at Stanhope Consolidated School.

KANSAS

Chanute.—The bond issue to provide for a junior college, for the building and equipping of a trade school and for improvements at two high and three elementary school buildings was carried by a vote of three to one.

Topeka.—Worthless bonds issued before 1890 amounting to \$132,720 are in the permanent school fund of Kansas, according to the twenty-ninth biennial report issued by the state superintendent of public instruction, W. T. Markham. Further statistics contained in the report show that more than \$1,000,000 of cash basis bonds were issued to meet the requirements of the 1933 cash basis law. . . . Total enrollment in one-teacher districts in 1934 was 100,362, with an average of 14.3 pupils to a teacher. . . . Pupils of the Boswell Junior High School recently issued a safety edition of the school paper, emphasizing safety for pedestrians and bicycle riders. Cartoons illustrated the danger of careless bicycle riding.

MICHIGAN

Lansing.—A series of tests on school-room lighting have resulted in a report describing conditions in many rural school buildings as "terrible" by Alice Evans, director of the health education service of the Children's Fund of Michigan. . . . A program to stamp out the unethical and irresponsible correspondence schools and to approve those schools which offer carefully planned courses directed by qualified teachers has been inaugurated by the school officials of Michigan.

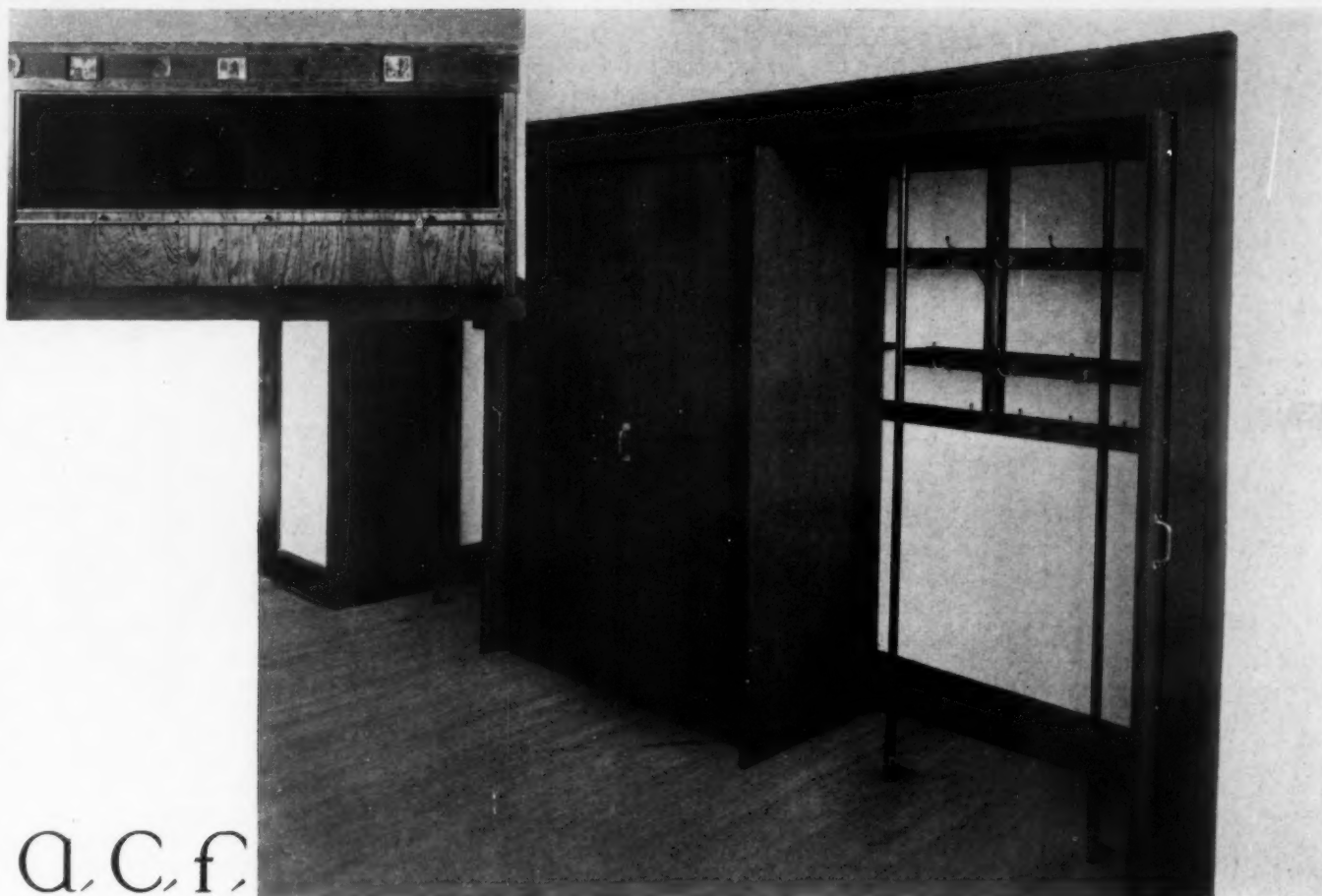
Pottsville.—School bonds amounting to \$20,000 were voted by Benton School District, No. 4, to help pay the cost of an addition to the present high school building.

MINNESOTA

Ramsey County.—Thirty schools are now serviced by the traveling library which makes seven trips in two weeks from the St. Paul Public Library. Inaugurated in 1925, with an appropriation of \$1,000, the service was so successful that the annual appropriation was steadily increased and now amounts to \$5,000. Contracts have been signed with each of the thirty schools whereby the state aid funds are annually added to by the county library budget, for the purchase of books.

NEBRASKA

Omaha.—Regulations providing for five days' sick leave a year without loss of pay for members of the city teaching

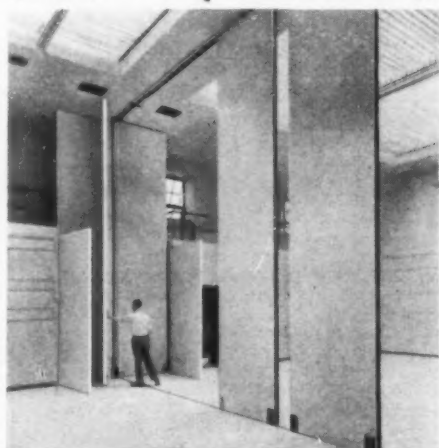


A.C.F.

FAIRHURST SCHOOL WARDROBES

...AND *folding* WALLS

Gymnasium, Yale University. Architect, John Russell Pope.



Also A.C.F. Fairhurst folding walls. Lock rigidly into place. May be furnished with blackboards and continuous chalk rail.

Fairhurst Wardrobes care for more pupils than do other wardrobes of equal dimensions. All parts subject to stress are amply rugged. In the open position the doors are entirely out of the way at the ends of each compartment. The doors pivot, there are no rollers or wheels, no track or slots on the floor. The operation is simple, smooth, and quiet. The interior arrangement remains unchanged, and aisles and interiors are free from obstructions whether the doors are opened or closed. Sagging of floors does not affect operation of doors in any way. All wardrobes furnished complete in wood or metal, including hooks and hangers.

AMERICAN CAR AND FOUNDRY COMPANY

30 CHURCH STREET, NEW YORK, N. Y. • TELEPHONE CORTLANDT 7-8100

Please send me data on A.C.F. Fairhurst School Wardrobes and folding walls.

Name _____

Address _____

staff have been amended to provide for cumulative sick leave. In case the five days have not all been used during any one year, the balance remaining shall be added to any unused days of the succeeding year or years, the maximum number of cumulative days being twenty-five.

OHIO

Struthers.—A partial reorganization of the schools has just been completed. The junior and senior high schools have been combined to provide one six-year program, and Paul W. Lisse and Clarence Specht have been made assistant principals.

Southern States

KENTUCKY

Lexington.—A central heating plant, made possible by a federal grant of \$275,000, will soon be constructed at the University of Kentucky. This will replace approximately twenty-two separate heating units now in use at an estimated saving of from \$5,000 to \$8,000. The plant will be located in the service building and heat will be shipped through underground piping to the other buildings.

TENNESSEE

Mercer.—The remains of the school building which was destroyed by fire last August have been cleared away by members of the community and the grounds prepared for the construction of the new building. Funds for its construction are coming from four sources, the insurance, the county court, the federal government and the community.

VIRGINIA

Corbin Hollow.—Near Skyline Drive in the Shenandoah National Park area is a unique school which operates only during the summer months and which admits adults as well as children. Extremes of weather make a long winter vacation necessary. Supt A. W. Yowell has supervision over the school.

Denbigh.—The county school board of Warwick County has restored a 10 per cent pay cut in the salaries of all teachers for the 1935-1936 school year. This restoration places the teachers on a salary level of 1929 and 1930. . . . Construction of a \$120,000 addition to the Morrison School in Warwick County has been started. This building is being erected under a PWA grant.

Earlsville.—The Albemarle County school board has decided to name the school being erected to replace the building destroyed by fire last year, the B. I. Wood School in honor of the late Broadus Wood, for thirty-six years a member of the board.

Hamilton.—Bids for the installation of

a new heating system at the high school were recently advertised for by T. J. McIlwaine, superintendent of schools of Prince Edward and Cumberland Counties.

Richmond.—For six years members of the Virginia Education Association have been admitted at special rates to the preventorium at the University of Virginia Hospital. Eleven hundred teachers have taken advantage of the contract between the association and the board of visitors of the University of Virginia. Recent revisions in the rules require active membership in the education association for the current session and credit in headquarters office for a contribution of \$4 to the Welfare Fund. This contribution is paid only once.

Western States

CALIFORNIA

Bakersfield.—Practically all of the children enrolled in the sunshine rooms at the Lincoln, Lowell and Hawthorne Schools, numbering fifty-nine, have shown marked gains in weight and physical appearance and in some cases complete recovery from nervous disorders, according to a report by Mrs. Lenore B. Elwood, director of the rooms.

Barstow.—A cottage classroom of the grammar school was completely destroyed by fire recently.

Hanford.—Four additional tennis courts are being constructed at the high school.

Manhattan Beach.—A portion of a tract of land owned by the city as watershed source for Well No. 5 is being proposed as a site for the new school by the city council, it is reported.

Palmdale.—The addition of another teacher to the school faculty has made imperative the erection of another classroom cottage.

OKLAHOMA

Muskogee.—An educational program for Oklahoma Indians, to include an estimated expenditure of \$1,500,000 to educate 32,598 tribal children, was recently announced by A. M. Landman, superintendent of the five civilized tribes, and George Wells, state director of Indian education.

Oklahoma City.—The board of education has appealed from the decision of the district court in the \$186,000 surplus dispute. The excise board wants to use this money to reduce the school levy, while the board maintains that it has the right to use the surplus for other purposes.

Trousdale.—The Pottawatomie County Historical Society is sponsoring a history of the county from the first white settler, to be written by the school children. Each pupil is being asked to obtain as much first hand information as possible to be correlated by the school of which he is a member. Norman Paine, superintendent of schools at Trousdale, is assisting in the project.

OREGON

Eugene.—With the signing on January 4 of the final contract in the \$1,422,000 building program of the Oregon State System of Higher Education, work is going forward on eight new buildings on the various campuses. Among them is an elementary teacher training school with gymnasium facilities at the Eastern Oregon Normal School, La Grande.

Coming Meetings

Feb. 5-6—Pennsylvania State School Directors Association, Harrisburg.

Feb. 6-8—Oklahoma Education Association, Oklahoma City.

Feb. 7-8—Head Masters Association.

Feb. 13-15—Rocky Mountain Speech Conference, Denver.

Feb. 14-15—Secondary Education Board, Lawrenceville, N. J.

Feb. 14-15—Southern Wisconsin Teachers' Association, Madison.

Feb. 17-20—National School Supplies and Equipment Association, Chicago.

Feb. 18-22—National Association of Deans of Women, St. Louis.

Feb. 19-22—National Vocational Guidance Association, St. Louis.

Feb. 20-22—International Council for Exceptional Children, Chicago.

Feb. 21-22—American Association of Teachers' Colleges, St. Louis.

Feb. 21-25—National Society of College Teachers of Education, St. Louis.

Feb. 22-27—Department of Superintendence, N. E. A., St. Louis.

Feb. 27-29—Progressive Education Association, Chicago.

Feb. 28-29—American Association of Junior Colleges, Nashville, Tenn.

March 12-14—South Carolina Education Association, Columbia.

March 13-14—Junior High School Conference, New York University, New York City.

March 19-21—North Carolina Education Association, Delegate Assembly, Raleigh.

March 25-28—Schoolmen's Week, University of Pennsylvania, Philadelphia.

March 26-28—Alabama Education Association.

March 29-May 2—Music Educators National Conference, New York City.

April 11—California Teachers Association, San Francisco.

April 15-18—Kentucky Education Association, Louisville.

April 16-18—Georgia Education Association, Macon.

April 18—Annual meeting of delegates, Massachusetts Teachers Federation.

Apr. 28-May 2—Association for Childhood Education, New York City.

June 11-13—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.

June 28-July 2—National Education Association, Portland, Ore.

Oct. 22-23—Indiana State Teachers' Association, Indianapolis.

The AMERICAN "IDEAL" School Type Cabinet



No. 9190

...Especially Designed for Printing Departments in the Junior High Schools and Clubs

Cabinet contains one blank case, thirteen California job cases and two Wells two-font cases. All cases full size.

All cases have cabinet fronts and are fitted with combination pull and label holders.

Double working-bank top to accommodate two pupils at a time in setting type.

Open front gives free access to cases without disturbing pupils who may be setting type.

Double overhead lead and slug rack providing, on each side, for generous quantity of lead and slug material.

Height of cabinet from floor to lower edge of working surface, 39 inches. Floor space, 42x26 inches.

Sanitary base permits keeping the floor clean under cabinet.

Working top overhangs 3 inches on each side, providing comfortable knee clearance for pupils working at the case. Substantial construction of hardwood with flat varnish finish.

Where desirable, cabinet may be ordered without overhead lead and slug rack, and with lead and slug case.

Where desirable, double working-bank top may be attached to No. 9178 American School Type Cabinet.

AMERICAN TYPE FOUNDERS

DEPARTMENT OF EDUCATION

ELIZABETH, NEW JERSEY

The Department of Education of American Type Founders employs the services of Professional Educators, and Efficiency Engineers, to assist you in organizing a Printing Course in your school

Everything for the School Printing Plant

Set in Century Schoolbook Family and Franklin Gothics

Vol. 17, No. 2, February, 1936

MODERN PROTECTION AGAINST TRESPASSING ✓ DAMAGE ✓ LOSSES

- Bias-cut slots in arms holds barbed wire securely without other fasteners.**
- Top rail coupling fits both inside and outside of rail—stronger, neater, better alignment.**
- Fabric ties—more of them—are solid nonferrous metal; can never rust.**
- New H-section line posts—heavier, stronger. Tubular posts also, optional.**
- Bell-shape concrete footings prevent frost heaving, hold fence true.**

★ TR. MRK. REG. U. S. PAT. OFF.

● The modern features of Continental Chain-Link fence include: Wire heat-treated for tensile strength and greater resilience under shock... our own special-analysis open-hearth steel heavy coated with alloyed zinc, tension-locked pins to hold fabric, beveled edge tension and brace bands... pivot type gate hinges... full-height, triple-locking gate fasteners. Designed by engineers and erected by experts for longer and better service at lower annual cost.

CONTINENTAL Chain-Link FENCE

LIFETIME PROPERTY PROTECTION

Mail coupon today for full information on all modern features; styles, heights, etc., for all conditions. For analysis and estimate by fence engineers, check here ☐

Name.....

Address.....

City and State.....

CONTINENTAL STEEL CORP.,
General Offices, Kokomo, Indiana. Plants
at Canton, Kokomo, and Indianapolis.

Get Analysis and
Estimate from Con-
struction Engineers

No Obligation

Also Valuable
Manual on Prop-
erty Protection

Visual Education Lowers Truancy; Aids Backward

One of the big problems of the bureau of attendance in New York City is that of making the schools interesting enough to lower the type of truancy which is fostered, to an extent, by the dryness of textbook instruction, says the *New York Times*. In this field, visual instruction, which can make subjects more vivid and understandable, has been a distinct aid.

In another department, that in charge of backward children, the use of sound pictures has been a definite contribution to teaching, in that it holds the attention of the backward child as an instructor is not able to do.

Among the films recently added to the collection of the bureau of visual instruction is one on street and highway safety prepared by the police department of New York City. Another, which deviates from the usual physiologic and scientific content of its class, is a health study consisting of twelve reels of story films, which, says Rita Hochheimer, acting director of visual instruction, "is especially valuable for younger children and its use will serve to motivate desirable health habits."

Used to assist young people to orient themselves in our economic industrial civilization is a film on the clothing industry, which shows the training of young workers in the Needle Trades High School followed by factory scenes of the same type of work.



On board H. M. S. *Bounty*, gathering material for a study guide to the current film. Shown are Frank Lloyd, director; Clark Gable; Dr. William Lewin, Weequahic High School, Newark, N. J., and Charles Laughton, who plays Capt. Bligh.

Release Film on Ethiopia

Two new films, one, "Ethiopia," and the other, "Three Centuries of Massachusetts," have been announced as ready for distribution by Bell and Howell Company, Chicago. Both are 16-mm.

sound on film, though the Ethiopian picture may be had as a silent. "Ethiopia" is not a war film, although thousands of tribesmen, afoot or on horseback, are caught by the camera. The photography is by Burton Holmes. "Three Centuries of Massachusetts" was made under the direction of Albert Bushnell Hart, Harvard professor, and its eight reels depict events in the history of Massachusetts from the Pilgrims' first glimpse of Cape Cod to the days of airplanes.

Photoplays Challenge Educator

For the progressive educator, photoplay study carries a challenge, writes William F. Bauer in the *New Jersey Educational Review*. The teacher who successfully directs a pupil in weighing the obvious virtues of a good movie against the deficiencies of a poor one, he feels, has already made an important contribution to good citizenship, while the teacher or administrator who has the courage to go further along the way of photoplay study is likely to become a benefactor to the community at large. A school that is acutely photoplay conscious in the best sense of the word is a school that is prepared to exert an important influence upon leisure time activity and adolescent ideals.

Films for the School Screen

VI—Austria, Hungary and Czechoslovakia

Determining Screen Size and Projection Distances

The determination of projection distances and screen sizes in relation to any 16-mm. projector and a lens of any focal length may be determined through formulas published in the *Classroom Film*.

While not absolutely accurate, the errors resulting from their use are so small as to be negligible, considering that the focal length of the lens and size of the aperture are not usually known accurately.

In the formulas U equals projection distance; W , width of screen; F , focal length of lens; A , width of projecture aperture, all expressed in the same unit of measurement. To determine the width of the screen for a given projection distance, W equals AU over F . To determine the projection distance required for a given screen size, U equals FW over A . The height of the screen, or of the projected picture, is equal to three-fourths of its width.

Austria I and II—Travel films showing scenes throughout the country. 2 reels. 35 mm., sound. Descriptive titles in English. Free except for return express charges. Reservations should be made far in advance. Austrian National Tourist Office, 500 Fifth Avenue, New York City.

Winter Sports in Austria—Skiing, skating, tobogganing, etc. 1 reel. 16 mm., sound. Descriptive titles in English. Free except for return express charges. Reservations should be made far in advance. Austrian National Tourist Office, 500 Fifth Avenue; New York City.

The Blue Light—Produced in the Dolomites. Dialogue in German and Italian. With music. Awarded first place by the National Board of Review as the outstanding importation of the season. 7 reels. 16 mm., sound. For rent or purchase. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City.

Austria—Down the Danube to Vienna and Budapest—Historic castles and landmarks along the Danube; cities of Vienna and Budapest. 1 reel. 16

mm., sound. For rent or purchase. Burton Holmes Films, Inc., 7510 North Ashland Avenue, Chicago.

Glimpses of Vienna—Characteristic city scenes. 1 reel. 16 mm., silent. For rent or purchase. Burton Holmes Films, Inc., 7510 North Ashland Avenue, Chicago.

Hungary—Large estates, primitive and modern agricultural methods, village life, embroidery, transportation, industries, Budapest. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company, 343 State Street, Rochester, N. Y.

Czechoslovakia—Land of Spas—Industries, native life and spas; Prague, Brno, Pilzen, Carlsbad and peasant dancing. 3 reels. 16 mm., silent. Transportation charges only. Advertising Department, Cunard White Star Line, 25 Broadway, New York City.

Prague—Views of this ancient city. 1 reel. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.



The PIONEERS...

THE HILLYARD CHEMICAL CO.

nationally recognized as the "Pioneers" in the floor maintenance and sanitation field . . . with almost a Third Of A Century of research and actual tests . . . with products that have proven their worth throughout the nation . . . are proud of the title "Pioneers."

To lower your maintenance costs use Hillyard products. The advice and recommendations of Hillyard Maintenance Engineers are yours for the asking. Hillyard's have products for every type of surface, rigid and resilient floors; walls, office fixtures and equipment.

There is a Hillyard Maintenance Expert in your community who is well qualified and equipped with a service car . . . to help you solve your floor maintenance problems. Call or wire the Hillyard Chemical Co. for a Hillyard service man, consultation free.

FREE. . . . Two valuable books just off the press. Hillyard's NEW 1936 catalog, "Modern Maintenance" and "Hillyard's Manual on Proper Floor Maintenance." Ask for them at the convention or write Hillyard Chemical Co., St. Joseph, Mo.

You are cordially invited to visit the Hillyard Exhibit, Booth No. E1-3-5, at the N. E. A. Convention, St. Louis, Mo., Feb. 20th to 27th inclusive. You will enjoy seeing the latest in floor maintenance equipment and there will be Hillyard Maintenance Experts at the booth to answer all questions on Modern Maintenance problems.

HILLYARD CHEMICAL COMPANY

BRANCHES IN
PRINCIPAL CITIES

ST. JOSEPH,
MISSOURI

SHINE-ALL SALES CO.,
DISTRIBUTORS

PROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

HYNSON, WESTCOTT & DUNNING, INC.
Baltimore, Maryland



After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

MERCUROCHROME, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

Rockefeller Fellows to Study Radio Technique

Three specially appointed fellows of the General Education Board, founded by John D. Rockefeller in 1902, were given the use of facilities of the Columbia Broadcasting System, beginning January 6, in order to study methods of planning and producing radio programs. The experiment will be carried on for three months.

After this course in first-hand observation the trio will go back to the areas from which they were selected and will apply what they have learned to increasing the educational possibilities of radio work.

The three fellows chosen are Arthur W. Colley, producer, now affiliated with the University Broadcasting Council of Chicago; Luke L. Roberts, manager of radio station KOAC, which is operated by the Oregon State System of Higher Education, and Stanley P. Young, author and dramatist, Westport, Conn.

Teachers' Colleges of Nation on Own Program

"The Teachers' College of the Air" is a regular presentation of Station WSM in Nashville, Tenn., each Friday evening at 6:30 o'clock. Prepared by the faculty of George Peabody College for Teachers, in collaboration with the educational department of the National Life and Accident Insurance Company, this series deals with a different teachers' college or normal school each week.

Programs are under the personal supervision of Dr. A. L. Crabb of George Peabody College, who makes all arrangements with the different schools featured throughout the series. Students and faculty members travel thousands of miles from their colleges to reach the studios of WSM.

Surveys Radio in N. Y. Schools

A check-up of radio facilities available at the present time in New York City schools is being undertaken by Dr. Harold G. Campbell, superintendent of schools, as part of a study of the subject supervised by Joseph M. Sheehan, associate superintendent. Principals are being questioned on what radio facilities they now possess and whether they would favor receiving radio lessons in specific subjects for specific grade levels. The expansion of radio in the schools will probably start with more frequent transmittal of addresses by public figures. Musical broadcasts and other instructive air features will also be used.

On the Air During February

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Standard except when otherwise specified.

Monday

American Education Forum—2:00-2:30 p.m. (NBC-WEAF).
History Series—2:30-3:00 p.m. (CBS).
Feb. 3—San Francisco.
Feb. 10—Louisville.
Feb. 17—Los Angeles.
Feb. 24—Chicago.
Education in the News, Office of Education—7:30-7:45 p.m. (NBC-WEAF).

Tuesday

Your Child, Dr. Ella Oppenheimer, Children's Bureau, U. S. Department of Labor—11:15-11:30 a.m. (NBC-WEAF).
Treasure Trails in Art Series—2:30-3:00 p.m. (CBS).
Feb. 11—Heroes of Our Country—In Marble, Stone and Bronze.
Feb. 24—A Boy of Venice Who Loved Color: Tintoretto.
Literature Series—2:30-3:00 p.m. (CBS).
Feb. 4—A Poet of Freedom—Milton.
Feb. 18—Alice Through the Looking Glass (intermediate).
Science Service Series—4:30-4:45 p.m. (CBS).

Understanding Opera—6:35-7:00 (CBS).
Medical Emergencies and How They Are Met, dramatized program with incidental music, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).
Feb. 4—Pneumonia, Dr. W. W. Bauer.
Feb. 11—Little Tips on Home Hygiene, Doctor Bauer.
Feb. 18—Heart Disease, Dr. Morris Fishbein.
Feb. 25—Crippled Children, Doctor Bauer.
You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).
Feb. 4—The Constitution as a Stabilizing Factor in American Life, David P. Barrows, University of California.
Feb. 11—Curbing the Court, Edward S. Corwin, Princeton University.
Feb. 18—Property Rights as Obstacles to Progress, Francis W. Coker, Yale University.
Feb. 25—The Constitution as the Guardian of Property Rights, William J. Donovan, former assistant U. S. Attorney General.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).
Feb. 5—Freedom of Expression of Press and of Teacher, Herman G. James, president, Ohio University.
Feb. 12—Indoctrination—What Does It Mean? Charles H. Judd, University of Chicago.
Feb. 19—The Doctor's Relation to the Home, C. A. Aldrich, M.D.
Feb. 26—Critical Appreciation of Motion Pictures, Edgar Dale, Ohio State University.
Geography Series—2:30-3:00 p.m. (CBS).
Feb. 5—Guam, Wake and Midway.
Feb. 19—Alaska, a Continental Northland.
Feb. 26—The Sierra Nevadas and the Big Trees.

Youth Today, auspices of the National Student Federation—4:00-4:15 (CBS).
Our American Schools, directed by Belmont Farley—7:45-8:00 p.m. (NBC-WEAF).
Feb. 5—Schools and Taxes.
Feb. 12—Equality of Educational Opportunity.
Feb. 19—Uncle Sam and His Nephew's School.
Feb. 26—School Leaders at St. Louis.
The Cavalcade of America, dramatization of significant moments in American History—8:00-8:30 p.m. (CBS-WABC).

Thursday

Music Appreciation Series, Standard School Broadcasts,¹ 11:00-12:20 a.m. (elementary); 11:25-11:45 a.m. (NBC).
Music and Elementary Science Series—2:30-3:00 p.m. (CBS).
Feb. 6—China (intermediate), and The Age of Dinosaurs.
Feb. 13—The Story of Valentine Day (primary), and The Flying Dragons.
Feb. 20—The Sierra Nevadas and California (intermediate) and The First Flowers.
Feb. 27—A Trip to the Southern Mountains (primary) and From Out the Shadows of the Dinosaurs.
Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C—11:00-12 m. Series B and D—11:30 a.m.-12:20 p.m. (NBC-WEAF, WJZ).
Vocational Guidance and Current Events Series—2:30-3:00 p.m. (CBS).
Feb. 7—Testing Yourself on the Job.
Feb. 14—How Jobs Are Related.
Feb. 21—Occupational Versatility as an Asset.
Feb. 28—Training for a Field of Work.
Magic of Speech—2:00-3:00 p.m. (NBC-WEAF).
General Federation of Women's Clubs Series—2:45-3:00 p.m. (NBC-WJZ).

Saturday

Our American Schools, directed by Florence Hale—11:00-11:15 a.m. (NBC-WEAF).
Cincinnati Conservatory of Music—11-12 a.m. (CBS).
Feb. 22—Special Broadcast from the National Vocational Guidance Association in St. Louis.
Your English—3:00-3:15 (NBC-WJZ).
Boston Symphony Orchestra—8:15-9:10 p.m. (NBC-WJZ).

Sunday

University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).
Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m. (CBS).
Philharmonic Society of New York—3:00-5:00 p.m. (CBS).
Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).
General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

¹Pacific Coast stations only.

For Dissecting a Grasshopper in Biology
Or Examining Flower Pollen in Botany
Or Scrutinizing Minerals in Geology



HERE'S
A NEW SPENCER
Microscope
THAT GIVES AN
ERECT IMAGE

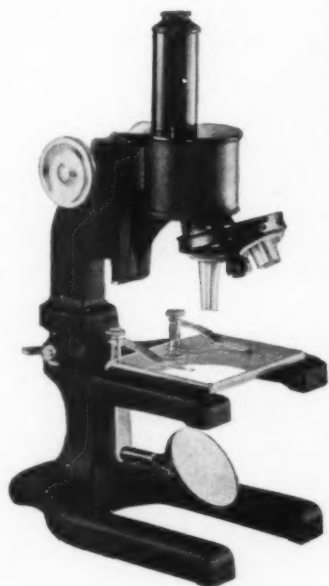
OF all the microscope features which make it easier for the student to study gross subjects under the microscope, probably the most important is an "erect image". He sees the image of the object exactly as the object lies on the stage. Image is not inverted nor reversed.


A reversed or inverted image causes confusion in the student's mind—an erect image eliminates this confusion so that his or her mind may be entirely devoted to the study of the subject under examination.

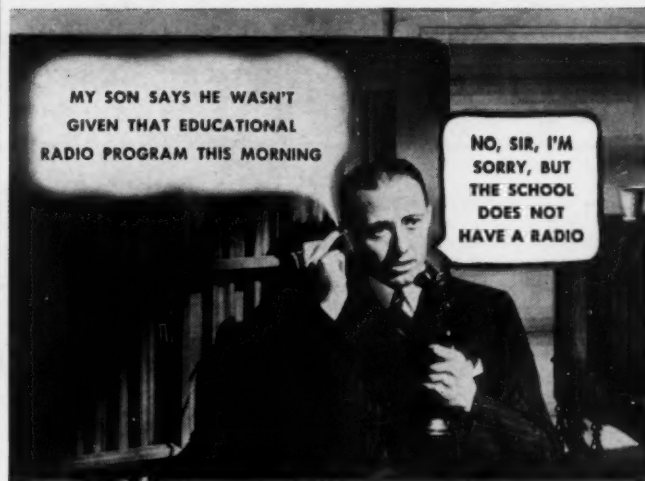
This new Spencer No. 61 Microscope offers, for the first time, a microscope giving an erect image for student examination of gross objects at a LOW PRICE.

No. 61 Microscope

For complete information and prices on the new Spencer No. 61 and other student microscopes, write for Folder M-70. Please address Dept. P-2.



Spencer Lens Company
Buffalo  New York



Radio is essential in modern education

PARENTS are hearing the modern educational programs now being broadcast, and are wondering why their children do not hear them—or are rejoicing with their children over these extraordinary free facilities offered by radio to the modern school.

Do the parents of your pupils ask for radio—or applaud your progressiveness?

If you do not now have radio facilities, ask RCA for information. RCA has been a pioneer and leader in radio educational work, and through its subsidiary, the National Broadcasting Co., provides many educational features. RCA equipment embodies the priceless experience of America's leader in radio, and in sound recording and reproduction. School systems include not only radio, but also record reproduction, and announcements through individual loud speakers in each room. Send the coupon below.

RCA VICTOR SCHOOL SOUND SYSTEMS

RCA Manufacturing Co., Inc., Camden, N. J., a subsidiary of the
RADIO CORPORATION OF AMERICA

Commercial Sound Section, Dept. NS.,
RCA Manufacturing Co., Inc., Camden, N. J.

Gentlemen: Please send me complete information about RCA educational equipment.

NAME _____ STREET _____
CITY _____ STATE _____

NAMES IN THE NEWS • • •

Eastern States

EDWIN C. BROOME has been formally reappointed superintendent of Philadelphia schools for the next six years. IRWIN T. CATHARINE has been reelected superintendent of buildings. A surplus of \$873,282 at the end of 1935 has brought before the board of education a discussion of restoring teachers' salary cuts.

CLARENCE E. ACKLEY, research associate and lecturer, school of education, University of Pittsburgh, has been appointed director of the bureau of professional licensing and chief of school law in the Pennsylvania state department of public instruction, to succeed WILLIAM M. DENISON.

DR. WILLIAM ALFRED EDDY, professor of English at Dartmouth College, has been named president of Hobart and William Smith Colleges to succeed the REV. DR. MURRAY BARTLETT, who will retire next May after an administration of seventeen years.

JOHN K. NORTON, Teachers College, Columbia University, has been appointed chairman of the Committee on Government and Educational Finance of the American Council of Education.

DR. HOWARD McCLENAHAN, executive secretary of the Franklin Institute of Pennsylvania, and former dean of Princeton University, died at Winter Haven, Fla. Doctor McClenahan was dean of Princeton University from 1912 to 1925. He also was for four years a member of the Philadelphia Board of Education.

DR. ISAIAH BOWMAN, president of Johns Hopkins University and formerly director of the American Geographical Society, was awarded the Henry Grier Bryant Gold Medal of the Geographical Society of Philadelphia.

LIZETTE WOODWORTH REESE, poetess and teacher, died at the age of seventy-nine. Teacher for forty-nine years, twenty of which were spent at Western High School, Baltimore, where a bronze tablet bearing her sonnet "Tears" was hung after her retirement, Miss Reese was the author of several books of poems and one of reminiscences, "A Victorian Village."

DR. G. ERNEST HESSER, director of music for the Cincinnati Public School system for the last five years resigned to become head of the department of music at New York University school of education.

DR. ALFRED C. THOMPSON, for twenty-six years principal of the state normal school, Brockport, N. Y., has submitted his resignation to be effective in June.

ROSCOE J. BACKUS, Old Forge, was elected president of the Associated Academic Principals of the State of New York.

ELAM E. KERSCHNER, principal, Ambler High School, has been appointed supervising principal of the public school system at Ambler, Pa., to fill the position left vacant by the death of JACOB M. FISHER.

RUSSELL E. BULLOCK, supervising principal of Fanwood and Scotch Plains schools, Plainfield, N. J., died at the age of forty-seven.

JULIA LEVI, for fifty years a member of the school system at Bridgeport, Conn., has resigned as principal of the Jefferson School.

CHARLES F. McMANUS, teacher in the Grafton Street Junior High School, Worcester, Mass., was named principal of the school to fill the vacancy caused by the death of PHILIP J. COONEY.

SANFORD B. COMERY, principal of the high school at Belmont, Mass., for the last fourteen years, died recently.

LIZZIE E. RECTOR, assistant superintendent in charge of school districts 36 and 27 in Brooklyn, N. Y., retires this February after thirty-eight years' service in the public schools.

EDWARD WILLIAM GLASBY, principal of the Port Leyden High School, Port Leyden, N. Y., since 1916, died recently of spinal meningitis.

Middle Western States

DR. GEORGE D. STODDARD has been appointed dean of the graduate college at the University of Iowa, to assume his duties in July, 1936. He will continue as director of the Iowa child welfare research station.

WALTER F. BOYES, superintendent of schools, Knox County, Illinois, for thirty-three years until his retirement last summer, died on January 12 at the age of seventy-one.

B. F. STANTON, superintendent of schools at Alliance, Ohio, and president of the Ohio Education Association, has been appointed director for the state of Ohio of the National Education Association. He succeeds W. A. EVANS, Cincinnati, who retired because of ill health.

E. N. DIETRICH, for eight years superintendent of schools at Bucyrus, Ohio, has been appointed assistant director of education of the state. Mr. Dietrich's two brothers are also Ohio school administrators. GEORGE C. DIETRICH is superintendent of Piqua schools and H. C. DIETRICH is head of the Bexley schools.

THE REV. RICHARD EGAN, Charlotte, Iowa, is the new superintendent of the parochial schools of the Davenport, Iowa, diocese.

HOWARD FEARING, superintendent of schools at Valley Junction, Iowa, was recently elected president of the Iowa State Teachers College Alumni Association.

EARL L. BEDELL, assistant director of vocational education in the Detroit public schools, has been cited for the laureate award of Epsilon Pi Tau. The citation reads: "For early extension of intermediate school industrial arts programs through the introduction and development of home mechanics, for interest in the development of mature technical and senior high school industrial programs, for exemplary leadership in the Michigan Society program, for notable services on the U. S. Office of Education committee on industrial arts, and for valuable services on the original committee of the American Vocational Association charged with developing organizations for industrial youth."

EDWIN A. TURNER, professor of education at Illinois State Normal University for the last twenty-eight years, died of heart disease January 14.

REID O. LUCE, superintendent of schools at Schoolcraft, Mich., has been appointed head of the high school commercial department at Traverse City, Mich. He will succeed HENRY OLSEN as business manager and assistant to Superintendent LARS HOSKSTAD. Mr. Olsen is leaving the school system after ten years in order to enter business.

OWEN J. WORK, junior high school principal at Wadsworth, Ohio, has been elected high school principal, succeeding C. J. MAYHEW.

STELLA SUFINSKY, supervising instructor of radio education in Detroit public schools, died recently. Miss Sufinsky had been connected with the Detroit school system for thirty years.

RUSSELL BENNETT, teacher at Gnadenhutten, Ohio, was elected mayor of that village.

WARD W. SHULTS, instructor in social sciences in the schools at Oscoda, Mich., has been appointed principal of the senior high school at Alma, Mich., where he succeeds C. A. SHANTZ, who resigned to accept a position at Ludington, Mich.

Specify "BECKLEY-CARDY" for Quality and Economy

BLACKBOARDS and CORKBOARDS



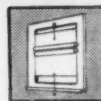
Hundreds of school officials and architects have found our special blackboard catalog an invaluable aid in preparing specifications for new buildings. It not only lists all the well known types of blackboards and bulletin boards, but it contains specifications and other technical information which have proved helpful in solving many very difficult blackboard problems. If you are planning new buildings, remodeling or replacement of old blackboards, you should have this catalog. Write for Catalog No. 57-A.

FURNITURE and EQUIPMENT



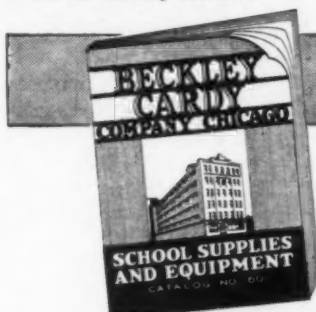
Before ordering new equipment, investigate the Beckley-Cardy line. High standards of durability, flexibility for varied uses, and encouragement of correct posture, are outstanding features. Every piece of equipment is the outgrowth of many years of experience. Customers in increasing numbers are approving the values offered by Beckley-Cardy Company, and reordering year after year as their needs require. Send for our new Equipment Catalog. We believe you too will be impressed with the values offered. Write for Catalog No. 157-A.

SHADES



Invaluable aids to youthful eyesight, Beckley-Cardy's "Sightsaver" Double Roller Shades afford "top" lighting and proper ventilation as well. Durably built and scientifically planned for correct light diffusion. Available in various grades of shade cloth at modest cost. Those interested in lightproof shades should have complete information on the Supertex line.

WELCOME TO OUR EXHIBIT,
N. E. A., ST. LOUIS, SPACE D2-D4



THE BECKLEY-CARDY CATALOG

A GUIDE TO WISE BUYING

In addition to the specialized catalogs mentioned above, this complete general catalog No. 60 offers a full and complete coverage of school needs. Beckley-Cardy quality and Beckley-Cardy values invite your study and comparison. Catalog mailed free on request.

BECKLEY-CARDY COMPANY

High Grade School Merchandise Since 1907

1624 INDIANA AVENUE • CHICAGO

CORROSIRON

ACID RESISTING HIGH SILICON IRON
FOR DRAIN LINES

Form which we suggest be included in
your Specifications:

All acid proof drain pipe and fittings shall be of ferro-silicon—**CORROSIRON**—or equal to comply with the following analysis:

"All acid waste and acid vent piping shall be of approved high silicon cast iron pipe and fittings of the bell and spigot type. The cast iron for acid waste and vent pipe and fittings shall contain:

"Not less than 14.25% and not more than 15% silicon.
Total carbon content below 1.12% and above .50%.
Manganese below .50%.
Sulphur below .05%.

"High silicon cast iron pipe and fittings for acid waste and acid vent pipe shall be of the thickness, etc., corresponding to extra heavy soil pipe and fittings unless otherwise approved."

CORROSIRON manufactured by Pacific
Foundry Company, Ltd.

3100 Nineteenth St., San Francisco

1400 So. Alameda St., Los Angeles	551 Fifth Ave., New York	1713 Missouri St., Houston, Texas	330 Central Bldg., Seattle, Wash.
---	--------------------------------	---	---

SHOW GEORGE ARLISS IN "THE IRON DUKE" ON A FREE PROJECTOR

Now your school can see and hear cultural entertainment without incurring the expense of buying a projector. We will supply free—no deposit required—a latest model, 16 m.m. talking picture projector for your use. Simply select two films a month from our extensive entertainment library and the projector is yours rent-free. Write now for Special School Plan C and our Sound-on-Film catalog.



500 Fifth Avenue

New York, N. Y.

Southern States

JAMES REID STERRETT, for twenty-six years superintendent of schools at Lebanon, Ky., died unexpectedly as the result of a heart attack.

T. N. TOUCHSTONE, superintendent of schools at Marks, Miss., has been appointed superintendent of schools in the Hinds County separate school district, which includes all white schools of the county outside of Jackson.

R. H. TUCKER, superintendent of schools at Pelahatchie, Miss., died recently after a brief illness.

Western States

DR. GEORGE C. KYTE is acting as dean of the school of education at the University of California in the absence of Dean W. W. Kemp during the next six months.

DR. EDWIN A. LEE has resigned as superintendent of San Francisco schools and will leave July 1 to become executive director of the National Occupational Conference. Doctor Lee assumed his San Francisco post in 1933. Ten new schools have been built and eighteen rehabilitated under his administration.

DR. WILBUR FLETCHER STEELE, one of the founders of the Iliff School of Theology and professor emeritus at the University of Denver, died recently. Doctor Steele is the father of William Daniel Steele, short story writer and novelist.

DR. VIRGIL E. DICKSON will become acting superintendent of schools at Berkeley, Calif., on July 1, when, according to a resolution adopted by the board of education, he will be reappointed assistant superintendent for four years and appointed acting superintendent. He will replace DR. LEWIS W. SMITH, superintendent.

E. OTIS VAUGHN, principal of the Reno High School, Reno, Nev., for the last seventeen years, was elected superintendent of Reno schools to fill the vacancy caused by the death of B. D. BILLINGHURST.

DR. GEORGE ALLEN ODGERS, acting president of Gooding College, Gooding, Ida., since last summer, resigned from the school just shortly before his scheduled inauguration as president.

HAMPTON BRADY, superintendent of the Nevada School of Industry at Elko, resigned on December 31.

W. B. KNOWLES, acting principal of the high school at Alhambra, Calif., was elected principal when EDNA BREEN, principal, wrote that she would be unable to return for the rest of the school term. Miss Breen was injured in an accident a short while ago.

Staff Is Appointed for New York School Survey

With organization details completed, work has actually started on a two-year inquiry into the character and cost of public education in New York. This work is being carried on under the auspices of the board of regents and it is possible will result in a drastic reorganization of state education.

In addition to Dr. Luther H. Gulick, who is directing this study, and Dr. Samuel P. Capen, chancellor of the University of Buffalo, his associate, the survey board will consist of Dr. Charles H. Judd, University of Chicago; Dr. Edward Charles Elliott, president of Purdue University; Dr. Albert B. Meredith of New Jersey, and Dr. Francis T. Spaulding of Harvard University. In addition to these the board includes Gustave A. Moe, fiscal expert from the Public Administration Service in Chicago, and Dr. Harry H. Moore of Bronxville, N. Y. Owen D. Young is chairman of the inquiry committee.

The survey, which will announce its findings in December, 1937, is expected to exhaust the fund of \$494,000 set aside for the work. The grant was made by the General Education Board, a Rockefeller foundation. According to Dr. Frank P. Graves, state commissioner of education, the study will "mark the beginning of the most significant educational advance of the century in America."

To Found School of Government

A gift of \$2,000,000 was received by Harvard University from Lucius N. Littauer, New York City, to be used in establishing a graduate school in government administration. The university is contemplating using one-fourth of the gift for the erection of a building to be known as the Littauer Center of Public Administration, with the other three-fourths reserved for endowment. A committee has been appointed to report on university education for public service.

District of Columbia

FLORENCE FALLGATTER has been appointed chief of the home economics education service in the vocational home economics division of the office of education, Department of the Interior. Miss Fallgatter has been acting chief since the retirement of Dr. Adelaide S. Baylor in October.

OSCAR L. CHAPMAN, assistant secretary of the interior, has been granted at his request an indefinite leave of absence.

Program of Progressive Education Association

"Child development—the basis for educational programs" is the theme of the national conference of the Progressive Education Association in cooperation with the Chicago Association for Child Study and Parent Education at the Palmer House, Chicago, February 27 to 29.

In general, the program will deal with three periods of the child's growth. The treatment in each of these periods, as it relates to the curriculum changes in accordance with the child's development, will be shown.

Among the sessions will be a symposium on "Present Day Challenges to the 'Progressive Family.'" There will be sessions on the arts covering literature, dramatics, puppetry, poetry, the dance, and music with direct relation to the general theme. Three sessions will be devoted to the actual development of the child—physical, mental and emotional.

A symposium on the work of the Progressive Education Association will be held. The educational freedom and the teacher's rights and duties as a citizen will form a part of this symposium.

Radio Star Offers Four- Year Scholarship Prize

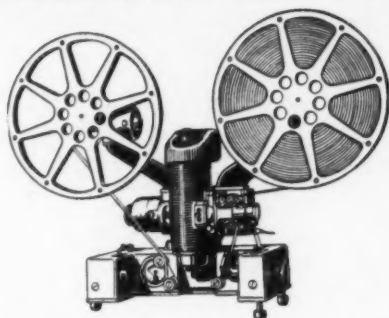
A four-year scholarship and complete maintenance at any American college or university will be awarded to the person, who, in the opinion of the judges, writes the best letter on the subject: "How can America stay out of war?"

A fund of \$5,000 has been set aside by Eddie Cantor, comedian of stage, screen and radio, to be used for this purpose, and the judges are Robert M. Hutchins, president of the University of Chicago; Frederick Bertrand Robinson, president of the College of the City of New York; Ray Lyman Wilbur, president of Leland Stanford University, and Henry Noble MacCracken, president of Vassar College.

Magazines Are Merged

Educational Law and Administration, started as a quarterly and edited for several years by Dr. M. M. Chambers, was merged with the *Ohio School Board Magazine*, beginning with the January, 1936, issue. The same board of associate editors will continue to serve and Doctor Chambers becomes consulting editor. Julius B. Tietz, secretary-treasurer of the Ohio State Association of Boards of Education, becomes the editor of the merged publications.

FLOATING FILM



One of the numerous exclusive features found only in

Bell & Howell FILMO Projectors

Annoying and eye-tiring is the "raining" in projected motion pictures which results from scratched film. Film does not become scratched in Filmo Projectors because it "floats" under perfect control past all film handling parts. In a Filmo, the film's picture and sound areas touch metal nowhere! Side tension springs (rather than surface tension) register the film at the aperture. Sprockets and film channel are recessed.

"Floating film" is but one of many exclusive Filmo features. Write today for the entire story of why your school projectors should be Filmos. There are models for every educational need—for both sound and silent film. Prices, \$125 and up.

BELL & HOWELL COMPANY

1855 Larchmont Ave., Chicago
NEW YORK • HOLLYWOOD • LONDON

THE
WORDS

"or Equal"
**WILL NEVER
GET YOU
HYLOPLATE
Quality**

nor the performance this popular Blackboard has been giving for nearly a half century.

Economical, long lasting, OLD RELIABLE HYLOPLATE BLACKBOARD has a velvety writing surface that registers a clear, uniform chalk mark. It never reflects light, nor does it fade out writing. So it is easy on pupils' eyes.

On your next school job, insist on OLD RELIABLE HYLOPLATE WITHOUT RESERVATION. That will insure your getting the GENUINE.

For Sample address Dept. H221

Make Booths D18, D20, D22 your headquarters at the Dept. of Superintendence Meeting in St. Louis, February 22-27, 1936.

WEBER COSTELLO CO.
FUTURES - - - CHICAGO OFFICE, ILL.

DOLLARS and Sense WIN A-S-E LOCKERS Wide Acceptance



Double Tier A-S-E Locker
(Group of four)

One of the toughest of locker tests is—school service. In this field A-S-E Lockers have proved their ability to stand up under years of hard use. By their ruggedness they trim annual locker costs to make A-S-E Lockers the biggest dollar value on the market.

And, it's simply good sense to choose lockers with so many important construction features. Hinges won't sag. 16-gauge one-piece doors take strains and spring back into perfect alignment! The tight over-lapping construction keeps out dust and vermin. The heavy frame stays true. The baked-on enamel finish with lacquered front insures good appearance for long years.

Write today for all the reasons why A-S-E Lockers are used in so many schools today. Ask for catalog.

ALL-STEEL-EQUIP COMPANY

605 JOHN ST.

INCORPORATED

AURORA, ILL.

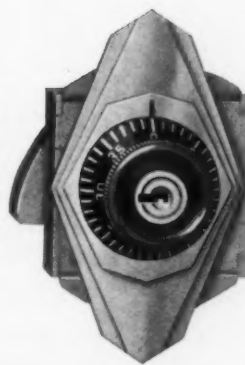
For SAFETY, DURABILITY and
CONVENIENT SUPERVISION
USE

ROCKFORD LOCKS



No. 264 SHACKLE LOCK

Master keyed for ease and convenience of supervision. Students use combination; officials the paracentric master key. Dial is locked against rotation when shackle is out; inserting shackle automatically locks the lock.



No. 267 LOCKER LOCK

Operates directly on spring latching device. Automatically locks when door is closed—dial is spun and disc tumblers disarranged. Paracentric master key provides greater security, prevents unauthorized duplications. Combinations easily changed.

National Lock Co.
Rockford, Illinois

NOTES FOR BUYERS . . .

Peace Prize

Of all wars fought on land the most acrid involve the rights to opening and closing of windows and the regulation of room temperature. If school teachers and office managers could find a way to reconcile the draft-evaders and those fiends for fresh air, the great army of school children and office workers could return to peacetime pursuits.

We are voting a noble peace prize to the Sarco Graduator System, a new means of automatic temperature control for large buildings devised by Sarco Company, Inc., 183 Madison Avenue, New York. Realizing that most buildings are extravagantly overheated in moderate weather with waste of fuel through open windows, this company has designed a mechanical system of automatic control directed by the weather. Two thermostats, one outside and the other inside the building, actuate the main steam supply valve.

That isn't the whole story but we have probably told enough to make clear how the renewal of old wars on a hundred thousand fronts can be prevented.

Seat of Culture

We read the other day of a Bostonian wintering in Florida who had never heard of the *Atlantic Monthly*. It occurs to us that there may also be Bostonians who never heard of a Deskor Chair.

Favorably known the country over, these Boston products may be commended to Bostonians. While the *Atlantic* remains rather much the *Atlantic*, the Deskor Chair is a recognized case of dual personality. The desk top slides over and down to become an extra seat supported by the original seat. Thus a study hall, in a twinkling, becomes an assembly room. Need we add that the pupils relish the conversion job?

We can't tell you more today but information can certainly be had by writing the Deskor Chair Sales Corporation, Park Square Building, Boston.

Ashes to Ashes

"Holy smoke," the Rubbish roared, "they're putting the heat on me. It's fair burning me up."

"I'm incensed over it too," hissed the Garbage. "I'm jolly well out of the frying pan into the fire."

The two old outcasts sizzled a moment together, the flames of their wrath fed anew by deep breaths of air.

"I don't wish to incinerate anything unkind, but I'm a Rubbish of the old school and none of my kin has ever been disposed of so briskly as by this Kerner outfit. It's ashes to ashes without even a prayer said over us."

But the soul of Garbage had already departed, borne up the chimney flue on a pillar of fire.

For the disposal of Rubbish and Garbage of the new school as well as of the old, examine the claims of Air-Torch Incineration, Kerner Incinerator Company, 3707 North Richards Street, Milwaukee, Wisconsin.

Man Bites Dog

Men, the vicious creatures, just can't keep from biting dogs, and so the Fourth Estate continues to flourish. It flourishes mightily in the high school where the editor and his staff are important personages, not merely to themselves and to the student body but—don't you forget it—to the administration.

Local advertising is not of a volume to support a printed newspaper in many high schools. For the large majority the happiest solution is publication by the mimeograph process. If you have been feeling a little superior to a mimeographed paper, you haven't seen the smart publications on file at the general offices of A. B. Dick Company, 720 West Jackson Boulevard, Chicago.

This company tells the youngsters how to organize a staff and publish a school paper in a booklet of practical journalism—gratis to you.

Damaged Goods

Just one slip can ruin a girl. Even boys rarely escape such encounters without bruises that may be slow to heal. It is good to know that the Franklin Research Company of Philadelphia has been interested enough to study the "hazard of slip."

First the research workers rated the possibilities of slipping, and as you can easily believe they are tremendous. It seems that it is not so much dance halls as it is school buildings that have what the investigators call "fast floors," and the amount of slipping that takes place in schools is scandalous.

What school men must do to prevent

these cases of "damaged goods" and to avoid possible damage suits brought by parents is to build up a higher resistance to student slipping. The first thing recommended is to have a talk with the janitor or custodian. Most of these maintenance men think a fast floor is made faster with wax. The Franklin people found that Rubber Gloss Wax slows down the floor and decreases the hazard of slip. Anything that promises fewer falls among our youth is worth trying.

Sore Indeed

Who steals their purse steals trash. But he who filches from them galoshes, mittens or muffler makes them sore indeed. So lockers must be made everlasting steel and secured with multiple locks.

To keep their cherubim from filching one another's personal effects the taxpayers have had to provide these rather costly contrivances. It is said that seven different trades and seven kinds of materials are involved in building the recesses that accommodate the average school lockers.

To eliminate the cost of finished recesses, the Berger Manufacturing Company of Canton, Ohio, comes along with its Bergerobes, which have reduced the cubical contents of the locker to a minimum. Its everlasting steel wardrobe is designed especially for elementary school classrooms. Five Bergerobes will accommodate forty pupils and provide also a supply closet, teacher's closet and book case.

Paris Letter, Personal

"Chevalier and Chaplin are still the cinema idols of Paris, take my word.

"I hear that in the States you seldom see a silent film, unless you are, by accident of birth, a school child. Many are, of course, but rarely those who desire it most. I should hate to go juvenile, only to find that Chaplin films are not educational.

"By the by, there is something from the States I've been writing up for the French cinematographic journals and they are chattering like monkeys over it. It's right up the school alley, too—a new projector made by the Victor Animatograph Co., Davenport, Iowa. It's strictly for silent movies, but Paris decrees that while silence is golden most seasons, there is a good case this year for walnut. Victor has concealed its grand new 16-mm. projector in a walnut case that has what I call 'eye appeal.' I appeal to you to look into it—for the schools' sake.

"Your devoted Gervaise."

"DESKOR CHAIR"

*invites you to examine
its new*

PRESSED STEEL MODEL

at the

ST. LOUIS CONVENTION

of the Department of Superintendence
of the N. E. A.

FEBRUARY 22-27

Booths J-28-30-32; K-27-29-31

DESKOR CHAIR SALES CORPORATION

Park Square Building

Boston

Let us send you the name of a
nearby school that saves from
20% to 40% of each year's fuel
with

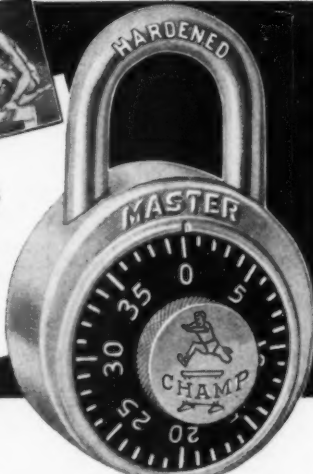
CHAMBERLIN WEATHER STRIPS

"SINCE 1893-THE STANDARD"

You can do the same thing in your school.
Save money, and at the same time in-
crease the warmth and comfort of your
schoolroom, protect the health of children
and teachers. Write us for further infor-
mation. Of course, there is no obligation.

CHAMBERLIN METAL WEATHER STRIP CO., Inc.
Brooklyn and Labrosse Streets • Detroit, Michigan

It takes the RIGHT combination
to make a "CHAMP". Now Master
proves it in a combination padlock.



**"Champ" OF
COMBINATION
PADLOCKS**

"Padlocks that protect!"
Our company grew to
be the largest exclusive
padlock manufacturer in
the world through an unswerving
policy of high quality.

"CHAMP" continues that policy
in a combination padlock.

We ask you to see "CHAMP".
School executives in charge of pad-
lock purchasing may have a FREE

SAMPLE
for the ask-
ing. It is

built like the lock on a safe . . .
more than 100,000 combinations.
It is strong — with double-wall case
and a hardened chrome nickel
steel shackle that is saw-proof and
file-proof. Compare these and other
features with the equipment you are
now using. Get the facts about
Master's "Chart-Control Plan" and
your school name stamped on every
lock. Write today. No obligation.

**MASTER
No. 1
"Secret
Service"**
One of a
complete line
of MASTER
PADLOCKS (key-type)
ranging from 10c to \$2.

World's Largest Exclusive Padlock Manufacturers

Master Lock Co.

Milwaukee, Wis., U. S. A.

THIS WORD HAS A VALUE IN DOLLARS!



"SAFE"! It means no big accident costs
for you to pay. It means faster work,
with both hands, and the workman's or
janitor's mind concentrated on his job.

It's a super-value, compared to the small cost of one or more
Dayton Safety Ladders! Many schools use Dayton's to save time
and to prevent accidents.

Sizes 3 to 16 feet, of durable airplane spruce.
Stand firmly. Straight back for close work.

Write Dept. NS-2 for Details

THE DAYTON SAFETY LADDER CO.

121-123 West Third St., Cincinnati, Ohio

DAYTON Safety Ladder

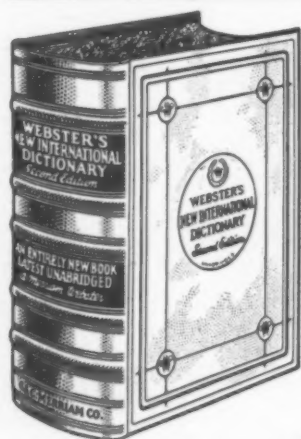
(PATENTED)

Stock carried on Pacific
Coast by E. D. Bullard
Co., Los Angeles and San
Francisco, and by 160
other distributors from
coast to coast. Made and
distributed in Canada by
Safety Supply Co.,
Toronto.

The School Library

has become an integral part of present day essential school equipment. It is important to the school official to know that he can put his library requirements into our hands with the feeling that the orders will be cared for completely and correctly to the last detail. • We specialize in the library branch of the book business, handling library orders from many hundreds of School Boards and Colleges from all parts of the country. • Satisfactory service and liberal discounts. • Send us your next order, large or small, and avail yourself of the advantages which we offer to your Board.

A. C. McClurg & Co.
Library Department
333 E. Ontario Street --- Chicago



The
**Supreme
Authority**

The **NEW**
Merriam-Webster

New from cover to cover. Backed by a century of leadership. William Allan Neilson, President of Smith College, Editor in Chief, heads the most authoritative staff of editors ever organized. Contains 600,000 entries—the greatest amount of information ever put into one volume—122,000 more entries than any other dictionary. 12,000 terms illustrated. Magnificent plates in color and half tone. Thousands of encyclopedic articles—3,350 pages. Write for free, illustrated pamphlet containing specimen pages, color plates, and full information.

G. & C. MERRIAM CO., Springfield, Mass.

**WEBSTER'S
NEW INTERNATIONAL
DICTIONARY** Second Edition

THE BOOKSHELF • • •

AN HISTORICAL STUDY OF EXAMINATIONS AND GRADING SYSTEMS IN EARLY AMERICAN UNIVERSITIES. By Mary Lovett Smallwood. *Harvard Studies in Education*, Volume 24. Cambridge: Harvard University Press, 1935. Pp. xiii+132. \$2.

A critical study of the original records of Harvard, William and Mary, Yale, Mount Holyoke and Michigan, from their founding to 1900.

INTEGRATION OF ADULT EDUCATION. By William H. Stacy. *Contributions to Education*, No. 646. New York: Bureau of Publications, Teachers College, Columbia University, 1935. Pp. vii+148. \$1.50.

An attempt to seek a base and a philosophy for the integration of adult education. The approach is sociologic. Some good material on adult education councils.

ECONOMICS OF THE HOUSEHOLD. *Its Administration and Finance*. By Benjamin R. Andrews. Revised Edition. New York: The Macmillan Company, 1935. Pp. ix+626. \$3.50.

If this volume had been available to "Mother" in the last generation, "Life With Father" could never have been written. Pointed for university levels but also valuable as secondary school reference.

THE SIZE OF THE LOCAL UNIT FOR ADMINISTRATION AND SUPERVISION OF PUBLIC SCHOOLS. By Alonzo Otis Briscoe. *Contributions to Education*, No. 649. New York: Bureau of Publications, Teachers College, Columbia University, 1935. Pp. xiv+110. \$1.50.

An approach to the problem of administrative reorganization in terms of one factor—size in relation to professional leadership. This study forms another link in the essential background of data underlying reorganization of our school districts.

ACTIVE GAMES AND CONTESTS. By Bernard S. Mason and Elmer D. Mitchell. New York: A. S. Barnes and Company, Inc., 1935. Pp. viii+600. \$3. Illustrated.

Companion volume to "Social Games for Recreation," this publication offers more than 1,800 games and contests of an active type. Personal and group types for indoor and outdoor use are extensively covered.

A MATHEMATICIAN EXPLAINS. By Mayme I. Logsdon. Chicago: The University of Chicago Press, 1935. Pp. xi+175. \$2. (Text Edition, \$1.50).

How simple mathematics becomes when explained by a master mathematician in the manner of this new college text and high school reference book! Good chapter on mathematical interpretations.

AN OUTLINE OF THE HISTORY OF MUSIC. Number 1 *Columbia University Studies in Musicology*. By Karl Nef. Translated by Carl F. Pfatteicher. New York: Morningside Heights, Columbia University Press, 1935. Pp. xvi+386. \$3.50.

Scholarship in music! To prove it Columbia University Press is planning a new series in "musicology," the first of which is this translation of Karl Nef's standard historical presentation. Valuable as secondary reference and University text.

BASIC STUDENT ACTIVITIES. *Organization and Administration of Home Rooms, Clubs, and Assemblies*. By Joseph Roemer, Charles Forrest Allen and Dorothy Atwood Yarnell. New York: Silver Burdett Company, 1935. Pp. xiv+367. \$2.20.

Presentation of material pertinent to purposes, values and methods of administering home rooms and other social activities in the secondary schools.

NEW

Modern-Life Speller

BY AYER—OBERHOLTZER—WOODY

This is a new series of spellers offering lessons built around special centers of child interest. It effectively employs a study-test-study method, with emphasis on study and attentive drill. The vocabulary, scientifically selected and graded, is grouped into three levels of usefulness. The unit arrangement, specific provision for creative units, and three-level grouping of words provide for flexibility of procedure and adaptation to individual differences.

Send for information.

WORLD BOOK COMPANY

Yonkers-on-Hudson, New York

2126 Prairie Avenue, Chicago

Boston

Atlanta

Dallas

San Francisco

Portland, Ore.

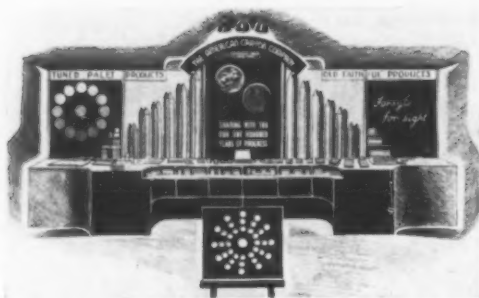
The IRWIN SEATING COMPANY *Extends to You . . .*

A most cordial invitation to make its exhibit your headquarters at the National Education Association Convention at St. Louis . . . Its personnel will welcome the opportunity of making your acquaintance and of familiarizing you with what we believe is one of the most complete and highly developed lines of fine school seating manufactured today.

Our Booth Numbers are E-33-35-37

The IRWIN SEATING COMPANY
GRAND RAPIDS • MICHIGAN

Seating Specialists for More than a Quarter Century



LOOK FOR
BOOTH 35-37

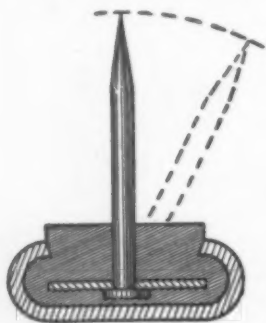
At the N. E. A.!

We will not demonstrate to you—you will be given an opportunity to demonstrate for yourself the properties of certain school materials . . . and their adaptation to your special needs. "Suitability to purpose" will be the keynote of this display.

See you at the N.E.A.!

THE AMERICAN CRAYON COMPANY
SANDUSKY, OHIO . . . NEW YORK CITY

Sole Makers of the Quality Line of
"OLD FAITHFUL" SCHOOL MATERIALS



Dotted lines indicate degree to which chair may be tilted while glide remains flat on floor. The rubber cushion absorbs all noise, and washer prevents nail from pulling out.

Do your pupils look up from their studies every time you move your chair? Is the noise in your schoolroom preventing good grades? If so, it is time to equip all chairs and movable furniture with

DARNELL Noiseless GLIDES

Your recommendation to install Darnell Noiseless Glides will result in floor protection, the prevention of wracked furniture, and a greater class efficiency.

Write for FREE Sample Set

DARNELL CORPORATION, LTD.

Station B, Box 4027-N, Long Beach, Calif.; 36 N. Clinton St., Dept. G, Chicago, Ill.

AN INTRODUCTION TO EDUCATION. By Emma Reinhardt and Frank A. Ben. Boston: The Christopher Publishing House, 1935. Pp. xxx+475. \$3.

A picture of public education in practice as the authors see it. Designed for professional students in education.

THE CHICAGO COLLEGE PLAN. By Chauncey Samuel Boucher. Chicago: The University of Chicago Press, 1935. Pp. ix+344. \$3.

Description of the Chicago plan. Should be in secondary school libraries to permit students to study these significant changes with respect to personal selection of institution.

CHARACTER EDUCATION. First Edition. By Harry C. McKown. New York: McGraw-Hill Book Company, Inc., 1935. Pp. xiv+472. \$3.

Sensible and sane in treatment is this new book by an author long noted for his practical approach to a subject. Teachers and principals will find it worth while reading; parents might use it effectively in adult education program.

A MEASUREMENT OF THE SECONDARY SCHOOL AS A PART OF THE PUPIL'S ENVIRONMENT. By J. Thomas Wade. Teachers College, Columbia University Contributions to Education, No. 647. New York: Bureau of Publications, Teachers College, Columbia University. 1935. Pp. vi+68. \$1.50.

At attempt to measure the secondary school plant as part of the pupil's environment. The attempt is worthy but the degree of subjectivity so large that the results must be considered most cautiously.

Just Off the Press

A STUDENT'S TEXTBOOK IN THE HISTORY OF EDUCATION. By Stephen Duggan. Revised and enlarged edition. New York: D. Appleton-Century Co., Inc., 1935. Pp. xxi+486.

COUNTY LIBRARY SERVICE IN THE SOUTH. A Study of the Rosenwald County Library Demonstration. By Louis R. Wilson and Edward A. Wight. Chicago: The University of Chicago Press, 1935. Pp. xv+259. \$2.

WEBSTER'S ELEMENTARY DICTIONARY. A Dictionary for Boys and Girls. New York: American Book Company, 1935. Pp. xii+739. \$1.20.

CONCISE BIOGRAPHICAL DICTIONARY. By H. L. and P. K. Fitzhugh. New York: Grosset & Dunlap, 1935. Pp. 777. \$1.

PETER'S FAMILY. By Paul R. Hanna, Genevieve Anderson and William S. Gray. Curriculum Foundation series. (Everyday Life Stories.) Chicago: Scott, Foresman and Company, 1935. Pp. 96. Illustrated in color. \$0.56.

THE THEORY AND PRACTICE OF STUDENT COUNSELING. By Hugh M. Bell. Stanford University: Stanford University Press, 1935. Pp. 138. \$1. (Paper cover.)

MY FRIEND, JULIA LATHROP. By Jane Addams. New York: The Macmillan Company, 1935. Pp. ix+228. \$2.

WRITERS' MANUAL. A GUIDE FOR HIGH SCHOOL AND COLLEGE STUDENTS IN THE MECHANICS OF WRITING. By C. A. Gregory and Helen Virginia Gregory. Cincinnati: C. A. Gregory Company, 1935. Pp. vi+156. \$0.90.

THE EVALUATION OF HIGHER INSTITUTIONS. VII. FINANCE. By John Dale Russell and Floyd W. Reeves. Chicago: The University of Chicago Press, 1935. Pp. xvii+133. \$2.

EDUCATION ON THE AIR, AND RADIO AND EDUCATION, 1935. Proceedings of the Sixth Annual Institute for Education by Radio, Combined with the Fifth Annual Assembly of the National Advisory Council on Radio in Education. Edited by Levering Tyson and Josephine MacLatchy. Chicago: The University of Chicago Press, 1935. Pp. ix+317. \$3.

OUR AMERICAN HERITAGE. FROM SUBJECT TO CITIZEN. By Lillian S. Coyle and Walter P. Evans. McGraw-Hill Series in Social and Commercial Studies. New York: McGraw-Hill Book Co., Inc., 1936. Pp. xix+404. \$1.36.

CONTENTS

For March, 1936

Side Glances—

SECTION I—EDUCATIONAL ADMINISTRATION

Looking Forward	13
Politics, politics! THE EDITOR discusses school janitors and politics, Secretary of War Dern and the R.O.T.C., politics in the Department of Superintendence, and partisan politics in Massachusetts. He has space also to sketch the proposed new plan for commercial exhibits at Department of Superintendence conventions.	
The Public's Schools	16
A. J. STODDARD's presidential address at the St. Louis meeting considers democracy's duty to the schools and the school's obligations to democracy.	
"Without Fear and Without Research"	20
Social studies teaching cannot be undertaken, declares the 1936 Yearbook, commented upon by CHARLES B. GLENN of Birmingham, chairman of the commission.	
The Scholar in an Age of Conflicts	21
The immediate obligations of organized education, in the light of constitutional experience, are outlined by DR. CHARLES A. BEARD in a thoughtful convention message.	
Figuring the Teacher's Load	22
A simple way to estimate it is told by WILLIAM A. WARD, high school principal, Eureka, Mo.	
Education for Democracy	23
The United States Commissioner of Education, JOHN W. STUDEBAKER, contrasts schools under dictatorships with those under democracies.	
Three Views on Federal Aid to Schools	25
A symposium, with CHARLES H. JUDD, University of Chicago; PRESIDENT L. D. COFFMAN, University of Minnesota, and PAUL R. MORT, Columbia University, as participants.	
Welding Class Wins Praise of Labor and Public	28
ROBERT D. HENDERSON, instructor of a welding trade class at Alhambra Union High School, Alhambra, Calif., tells the projects accomplished, including an extension of the school heating system.	
Ten Vital Issues	32
Are here reviewed by THOMAS H. BRIGGS, Teachers College, Columbia University, chairman of the commission on the orientation of secondary education.	
Turning the Spotlight on Rural Education	33
Iowa's superintendent of public instruction, AGNES SAMUELSON, condenses her convention speech into two pages of forceful argument.	

A. L. THREL-

KELD, superintendent of schools, Denver, was elected president of the Department of Superintendence at the St. Louis meeting. Jesse H. Mason, superintendent of schools at Canton, Ohio, was named second vice president, and J. C. Cochran, head of the schools at San Antonio, Tex., was chosen a member of the executive board. Dr. A. J. Stoddard, the retiring president, automatically becomes first vice president.

The new president was born at Lancaster, Mo., March 4, 1889. He took his



undergraduate work at the University of Missouri. He has an M.A. from Columbia University, an LL.D. from the University of Denver, and an honorary Ed.D. from the University of Colorado. His teaching and early administrative experience was all in Missouri. He went to Denver in 1921 as assistant superintendent, later became a department superintendent and was elevated to the superintendency in 1927.

NOW in its ninth year, the National Music Camp at Interlochen, Mich., is no longer an experiment. Its campus embraces 112 buildings—studios, concert halls, classrooms, practice rooms, dormitories, a hospital and a hotel. Its music library, including a thousand phonograph records, is valued at \$30,000. Physically it is a large enterprise; education-

Published monthly by The NATION'S SCHOOLS PUBLISHING CO., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

CONTENTS

ally it is even more significant. The story of this music camp will be told next month by Joseph E. Maddy, professor of music, University of Michigan.

"COMPLETE as It Stands," the new Washington Rural High School at Bethel, Kan., has been erected at the remarkably low cost of 20 cents a cubic foot. Under the foregoing title, Owen H. Coberly, the principal, has prepared a description of this new plant for the April issue. A great deal of intelligent planning has gone into constructing such an up-to-date structure at this low cost.

FOR several years Ralph Haefner, New York City, has been interested in the use of the typewriter by young children, having served as field director of the original Wood-Freeman investigation. His book, entitled "The Typewriter in the Primary and Intermediate Grades," deals with a host of practical problems met by teachers. He is now developing a series of workbooks for children. The first of these, "Ted and Polly," is for first and second grade children. The second in the series, "Fingers That Talk," now in press, is for third and fourth grade pupils. From his experience Mr. Haefner has prepared an article for the April issue on typing in the elementary school.

AMONG interesting conversationalists we must include good "human interest" photographs. They demand attention and get it. They can be amusing, charming, informative, persuasive. Conversely, there is nothing socially duller than the purveyor of statistics.

In his community at Kalamazoo, Mich., Supt. Herold C. Hunt has supplanted a long row of wall flowers, which were the old-type annual reports, by a social success. In place of impersonal figures and tabulations, he has introduced into the annual report a series of pictorial presentations interpreting the school system's methods and goals.

If you, too, would enjoy a stag line the next time you present to local society your annual report, read Mr. Hunt's article in the next issue.

Accent on Youth 35

As given under the American Youth Commission and as outlined to the Department of Superintendence by the director of the commission, HOMER P. RAINEY, former president of Bucknell University.

We Must Choose 36

America can decide whether the radio waves are to be monopolized by private broadcasters and public benefits are to be made subordinate and incidental to selling goods. PRESIDENT ARTHUR G. CRANE of the University of Wyoming put the question to the Department of Superintendence.

Insurance Controversies 37

School insurance litigation—much of it is due to the over-aggressiveness and questionable business ethics of competing private insurance companies, M. M. CHAMBERS, specialist in school law, declares in his monthly review.

Are Teachers Educated? 39

Fifteen points made by the National Survey of the Education of Teachers are discussed by E. S. EVENDEN, professor of education, Teachers College, Columbia University, and associate director of the survey.

Happy to Say 42

Our good friend WILLIAM McANDREW writes on random topics.

SECTION II—THE SCHOOL PLANT

W. K. Kellogg Auditorium, Junior High School, Battle Creek, Mich. 43

ALBERT KAHN, INC., Detroit, designed the building.

Substituting New for Old 44

PRINCIPAL BURTON A. ADAMS describes the modern structure that occupies the space between two older buildings at Technical High School, Springfield, Mass., making a complete and modern school unit.

School Makes Itself Heard 49

One way to acquire a public address system at small cost is described by W. F. CURRINGTON, school custodian, Jackson, Ohio. He lists the materials used with their costs and explains the entire procedure as carried out.

Food Buying Based on Fact 51

ETTA H. HANDY, director of dining halls, Eastman School of Music, University of Rochester, gives pointers on purchasing for school cafeteria managers.

Convention Report 54

What was said and done at the Department of Superintendence convention of 1936. What was on exhibit in St. Louis in the way of persons, projects, products.

Better Plant Practices 48

Luncheon Best Sellers 52

Coming Meetings 64

News in Review 66

Private Schools 68

The Bookshelf 82

Regional News 70

Visual Education 74

Radio News and Programs .. 76

Names in the News 78

Notes for Buyers 80

LOOKING FORWARD

Take the Janitors Out of Politics

ONE of the weakest spots in the field of school administration has been school plant operation and upkeep. Since the development of the first city school requiring janitorial help the area of operating service has been intimately connected with local politics and the spoils system.

The attitude of early superintendents and principals toward nonteaching activities was that of an aloof academic mind. Principals and teachers were not far behind. Nonprofessional activities were first of all cared for by a regular member of the local board of education elected as secretary. As school systems grew these member-secretaries gradually became full-time professional secretaries, usually upon failure to be reelected to active board membership. They were politically instead of academically minded. From these divergent trends developed all of the inadequacies and weaknesses of our dual and multiple executive organizations.

Engineers and janitors were quickly attached to the political machines of the school board and of the city or county organizations. They held their jobs not because they knew how to operate a school building but because they could be counted upon to deliver a certain number of votes on election day. In many instances the school became a place for rest between elections.

These employees were not responsible to the principals, and even the superintendents exercised little authority over them. Their appointments were the specific prerogatives of board members. In many well authenticated instances these unpaid board members each month "shook down" janitors and engineers in their own wards or inspectorial precincts for a percentage of their wages for what were euphoniously known as "campaign gifts."

It was possible for a janitor to neglect his work or to be drunk on the job, or to be tuberculous or an epileptic. If the principal complained, it was easier to remove the principal than the janitor.

Some twenty-five years ago certain educational leaders began to realize the importance of janitorial and engineering service. They felt that in the special field of plant service the operating personnel are relatively as important as are the teachers in their field. The significance of the physical plant as a background for

instruction and health was slowly gaining recognition. Although it seemed hopeless to accomplish anything constructive against the wishes of the ward or precinct-elected board of education, the progressive discussion of the problem aroused public opinion to some extent and even some school board members were soon convinced.

Schools for the training of operating employees sprang up in certain centers. Womrath in Minneapolis, Milligan in St. Louis, and King in Detroit were among the first to provide for this special training. Of these training centers the Minneapolis school has had the longest consistent life and has achieved the greatest reputation. Other cities, including Milwaukee and Cleveland, also provided specific training for new employees. Universities and teachers' colleges in different sections of the country are now holding institutes and special summer classes for operating personnel.

Gradually there has developed in the larger school districts an entirely different attitude toward the janitorial problem. The operating officer in most small cities and towns is still appointed and retained for political reasons, but in the larger cities, with few exceptions, a civil service and tenure for capable and well trained personnel have been created.

This new emphasis on specific training is a far cry from the spoils system that surrounded the schools a generation ago. But it is far from achieving its ultimate goal. Academic snobbishness is still a factor in holding back proper recognition for this work. Sensing this traditional set toward janitorial work, certain educationists more than a decade ago suggested that the titles of "engineer," "engineer-custodian" and "custodian" be substituted for those of janitor and cleaner as a means of creating status for the newer concept of this work. More recently this movement for change in name has been vigorously taken up by the National Association of Engineers and Custodians, with headquarters in Minneapolis.

The elevation of school plant service to its proper place in the general administrative scheme is important to the general success of the instructional process. Only as this service can be properly dignified by training and selection of personnel will it be possible to remove school plant operation completely from the political spoils system. The extension of this movement and the wider

adoption of the new terminology are to be considered highly desirable and the movement is commended to school executives for consideration and support.

Must We All Agree With Mr. Dern?

IN HIS last annual report, Secretary of War George H. Dern implies that all opposition to compulsory military training in the public schools is "seditious propaganda." As a result a group of well known educationists, with Professor-Emeritus George A. Coe as chairman, has rightfully protested to President Roosevelt against this implication.

As any other private individual, George H. Dern is entitled to full and free expression of his views, whatever their merit. However, when made in his capacity as a responsible federal officer, who should be somewhat familiar with the democratic method of government, such an official charge cannot be condemned too strongly. It is customary in bureaucratic and partisan political thinking to meet valid criticism by dragging the well known red herring across the path to obscure reasonable discussion. Mr. Dern has apparently followed this ancient custom.

Many educationists believe in the value of military training and many do not. Among those who are honestly opposed are a small group of extreme pacifists, a much larger group of methodologists who think the mandatory placement of this activity in secondary schools is wrong and that the subject matter is poorly adjusted, and a large majority of the physical educationists who sincerely feel that the values derived from military training are distinctly overrated.

Among the group that believes in the social and physical values of military training there are many who are opposed to the compulsory features of the R. O. T. C. and to the continued straying by army officers from the field of military training into the field of War Department propaganda. The unfortunate selection by the War Department of socially unintelligent personnel in certain instances has not helped much.

The discussion of the values of military training in our public schools is a natural discussion. It should take place. In fact, if it were not for the fear of retaliatory propaganda from chambers of commerce, the American Legion, and the reserve officers, there would be much more free educational discussion of this activity at state and national professional gatherings. It would receive the same frank and objective treatment that every other curricular phase does. The question of its real value might then be determined during the course of years and essential adjustment made. Until the War Department intelligently takes this point of view it is merely laying up a great deal of future trouble.

The direct implication by the civilian secretary, George H. Dern, that anyone who disagrees with the activities of the department of which he is titular head

is guilty of "seditious propaganda" smacks not a little of bullying fascistic methodology.

It is so completely undemocratic in its arrogant assumptions of bureaucratic infallibility and its implied condemnation of free discussion that the statement merits a strong personal rebuke from the President of the United States.

Of what value is civilian control of the War Department if the secretary does not read with more discernment and judgment the material that is prepared for him? Civilian control of the army assumes an understanding of the civilian viewpoint and the nature of democratic method. It is an essential restraint upon the narrow point of view of the professional specialist. Further emotional excursions of this type are going to lose for the War Department the support of a large number of educationists who are sincerely friendly to intelligently conceived and directed military training upon the democratic basis of free choice.

Professional Politics

THE revival of pressure-politics during the past few years in the selection of officers for the Department of Superintendence has resulted in considerable discussion by the membership. It is not the first time that this problem has arisen. During the reorganization throes of the early twenties the problem was discussed and the possibility of placing responsibility in the hands of the board of directors was considered. The final decision was against this procedure because it was felt that too much pressure would be placed on the members of the board by individuals with preferred candidates. The procedure was also considered as not very democratic as it prevented members from expressing their individual preference for leaders.

Following the reorganization, the offices were filled for a considerable period without contest and without campaigning. To the outsider it appeared as if the department was really attempting a choice in terms of merit. This phase apparently stopped several years ago when "committees" early in the year began to cast their nets for votes for special candidates. It always puzzled us how the candidate could remain unconscious of this unusual activity and discussion in his behalf, but somehow it was accomplished. This, gentle readers, indicates that the age of miracles has not yet passed!

The 1936 campaign got under way early in 1935. It was featured by the appearance of a politically minded state association secretary who has long been credited with being one of the political strategists of the National Education Association. There were also "committees." One candidate pledged, at least his "committee" said he did, that he would do things that are entirely beyond the powers of a president of a department of superintendence. In addition, the whis-

pering campaign, used effectively at Atlantic City, was unfortunately again introduced at St. Louis.

Early last fall we began to receive complaints from members of the Department of Superintendence that pleas for votes were cluttering up their mail. Some felt that the entire practice was skirting the edge of professional politics to such an extent that something should be done about it. No one questioned the character or ability of the several candidates but they did criticize the methods of the "committees" working in their behalf.

These complaints, in larger numbers, also reached the committee on longer planned programs and much time was spent in considering ways and means of eliminating these increasingly undignified scrambles for high office and still retain the democratic aspects of popular choice. Various methods were considered and rejected. Considerable study was given to the preferential ballot method of making nominations and selecting the president, such as had been in successful use by the National Society for the Study of Education for a number of years. It was obviously the method least susceptible to political manipulation. After careful consideration the committee on longer planned programs made it one of the significant recommendations in reporting at St. Louis.

Under the rules, the new method cannot be adopted before the 1937 meeting, which would make it effective for the first time in 1938. Since it keeps the power of choice directly in the hands of the members and promises to eliminate the effective political maneuvering that is becoming distasteful to so many of its members, it merits the earnest study of every member during the ensuing year.

To Make Exhibits Valuable

TO THOSE numerous individuals who believe that the exhibit of commercial products at the annual Department of Superintendence meeting can be made much more worth while both to the educationist and to the exhibitor by better organization and selection, that section of the St. Louis report of the committee on longer planned programs concerned with the relationship of exhibits to the convention should be most welcome. For others, careful study is recommended since the complete report will be submitted for approval at the 1937 meeting.

The committee's recommendation takes from the exhibit some of the feeling that in the past it has been chiefly a revenue activity. It relates the exhibits as demonstration laboratories to the program and provides for the explanation of new trends and developments in a special program devoted to this purpose. The elimination of special propaganda exhibits is recommended. This significant section is reproduced here in full:

"The relationship of the commercial exhibit to the

annual meeting of the Department of Superintendence should be in the nature of a demonstration laboratory which affords to school executives means whereby they may become acquainted with the latest developments and contributions to the physical side of education. As steps in securing greater effectiveness, the following recommendations are presented:

"1. That one program early in the convention be devoted to a presentation of recent developments in buildings, equipment and supplies, built around the new products of the year.

"2. That exhibits be arranged in a functional setting so they may be seen in their application to a typical school.

"3. That an effort be made to secure more extended exhibits of construction materials and mechanical equipment.

"4. That special interest groups with reformatory or propaganda programs only be excluded from the exhibit hall.

"5. That there be inaugurated a continuing committee of the Department of Superintendence with staggered terms of membership to determine policies, procedures and organization of these exhibits."

Where Theory Is Not Valid

IN RECENT years many specialists in political science as well as educationists have been advocating abrogation of the school state and the integration of the educational function with other departments. They have argued against the popular election of state boards of education. They have also argued against appointed boards of education. Drop the idea of a board and let the governor choose the state superintendent was their slogan. In that way, on the peculiar assumption that governors are free nonpolitical agents, only merit will be involved in the selection of this official, they have reasoned.

A number of states now employ this method. What is the story? Let's look at Massachusetts as the most recent example. After twenty years of the most efficient and unselfish administration of public education, Payson Smith was removed by the governor for no other reason than that his party considered the job as patronage. The governor succumbed to pressure. Doctor Smith was not reappointed. Partisan politics again control the Massachusetts state department.

There is one moral in this episode! Let us fight to retain and to expand the independent school state with a nonpartisan state board of education, elected directly by the people, choosing their executive for purely professional reasons. There is little profit in deeper affiliation of public education with partisan politics.

The Editor



Two views of a St. Louis school. Merely dotting our land with these handsome buildings, or hanging masterpieces of art on the walls, or making available countless books does not mean that all children will be able to claim the messages that these sources of happiness have for them, President Stoddard told the delegates.

By A. J. STODDARD

The Public's Schools

AFTER a long and persistent struggle the schools of America that were so intended have finally become public schools. At least, they have become free to all the children of all the people. More recently much progress has been made toward making them actually minister to the varying needs of all the people. Their program of service has become so adapted as to meet the individual needs of boys and girls, and even adults, to an extent scarcely comprehended as possible a generation ago.

There was a time when these schools served only those who were physically and mentally able to attend them and profit from the limited instruction afforded. Gradually the

program was extended to include all who could be served, either in or out of school. Education is now provided for the anemic, the crippled, the blind, the deaf, the dull, the gifted, the academic, the artistic, the young, the old.

Teachers are sent beyond the schools into the homes and the hospitals; continuation and night schools serve those who no longer fit into the regular schedule; adult classes carry the program into the upper reaches of life. Thus, although it has

taken more than a century to make them so, the schools of our democracy have at last become public. While this ideal has been largely attained, much remains yet to be done in refining and adjusting the program to make it really minister to individual needs.

But there is another battle that has not yet been won, one that is fully as important as this first one to make the schools of our nation truly public. That battle is to make these schools the public's schools. This



"This Democracy and These Schools" Is Concern of Presidential Address

public is our country and that for which our country stands in the lives of its people. What must be done to make these the public's schools, to make them best serve the purposes of the democracy?

Obviously one of the first purposes to be served is equipping the people generally with those common integrating facts, knowledge and skills necessary for them to get along together. This was essential in a rapidly expanding democratic society, where every man is supposed to be

able to care for himself through his own initiative and industry.

The second objective of any nation's schools ought to be so to educate the people that they will understand and approve the political philosophy that dominates the nation. In other words, the schools ought to help the people to understand their government, its purposes and the means through which these purposes are to be realized. Some would question whether the public's schools should also indoctrinate in favor of

the approval of the political philosophy upon which the nation is founded. In other words, have the schools of our democracy a duty not only to interpret our political institutions and educate concerning them, but also to attempt so to shape the thinking of the people as to bring about an approval of that for which the democracy stands?

True education develops within individuals the power of critical judgment, each according to his individual ability. There may always be a portion of society that cannot judge intelligently no matter how much or how good their education may be. But the large majority of our people can be taught to exercise discrimination in their political thinking. It might be all right to rest the case for democracy with the critical judgment of an educated people were it not for the fact that the emotions in time of crisis are likely to becloud even very critical judgment. It would seem, therefore, that until our schools can attain reasonable success in developing generally the ability to think critically and to evaluate impassionately even under conditions of stress and strain, the public has a right to expect the schools to indoctrinate in favor of the political institutions it has founded.

In other words, our democracy has a right to expect that its schools will teach not only about the different philosophies that dominate governments, but also that they will teach that a government of the people, by the people and for the people is the best of all governments. They will teach that dictatorships always represent a backward step and leave their people less able to govern themselves when the protecting hand is withdrawn, as surely it will be eventually. They will point out that there is much evidence that of the great nations of the world the oldest democracies are withstanding the storms of the last few years more effectively than other governmental forms. They will show that a democracy is education in action, that the attempt at self-government is the highest test of

education. Those who attempt to govern themselves may make many mistakes but in a democracy these mistakes are the bases of progress. When the people have no voice in government, those who would point out mistakes are eliminated unless they become too strong or the mistakes too obvious.

After the World War many of the nations became impatient with their old forms of government, ill adapted to the problems of an age of science and rapid change. Throughout the world the common man had sacrificed for his country and he began to demand that his rights be recognized and guaranteed. Some of the nations turned to democracy. But the world depression came as the aftermath of the war and many of these countries gave up their attempts to govern themselves and turned to one "ism" or another in an attempt to save themselves. It should be remembered that we in America experimented with democracy in one form or another, and in one stage or another, for more than a century and a half before we actually tried to govern ourselves. Even then, the first few years were critical ones and the outcome was often in doubt.

Do We Underteach Democracy?

In our eagerness to make sure that all other forms of government have a fair hearing in our schools we are likely to underteach democracy. Sometimes we exaggerate our sense of fairness to the degree that in our enthusiasm for the open mind we actually indoctrinate in favor of that for which we are only asking a square deal. Many of our educators who have visited certain European countries in recent years have exhibited that tendency and have given wrong impressions to those earnestly interested in the real function of our own public schools.

Of course, there will be those who would deny the right of the public's schools to indoctrinate in favor of democracy. Certainly this indoctrination ought to be based upon an intelligent understanding of the political phil-

osophies of the world. There are two types of indoctrination; one that produces a belief as a result of a sincere effort to compare honestly contrasted points of view; the other that demands a blind acceptance of a dogmatic position or attitude without the consideration of alternatives. Even the self-appointed keepers of candles of patriotism in our midst ought to have enough faith in the democracy to favor the former type of education. Otherwise, they evidence a lack of faith in the very institutions for which they demand unquestioning loyalty.

Possibly all that is necessary is for the schools to bring about an unbiased and honest consideration of all governmental philosophies by the students, trusting that democracy will triumph because it is the most desirable form of government. If this does not result, the public's schools are justified in resorting to the next degree of indoctrination. Nations have a right to insist that the schools, which they establish and support, maintain the fundamental political philosophy upon which their governments are founded. This means that Russia or Italy or Germany or any other nation may use its public schools to indoctrinate the political thinking of its people in any way it considers best. Of course, we in America believe that they must resort to a lower degree of indoctrination, or higher, depending on the point of view, because their political philosophies are more untenable from a reasonable or enlightened standpoint!

Political Problems Must Be Taught

The teachers in the public's schools are certainly above the general average in intelligence. Moreover, they are employees of the democracy and every act, every utterance, is subject to the scrutiny of the public. It is logical to believe that no other group in society can be entrusted more safely than can our teachers with the education of our people concerning political problems. Any attempt to deny our people the privilege of learning about the various

governmental philosophies is not only undemocratic in principle but also a subversive force in democracy.

The third function of the public's schools as they are here conceived is somewhat similar to the second but applies socially rather than politically. We have certain conditions in our country, found somewhat in other countries but not to such an extent as here, that have in themselves the possibility of destroying our country, unless understood and combated.

Cultivating Real Tolerance

The United States is a far-flung country geographically. It is made up of many sections. Somehow our people must treasure the cultural values indigenous to the section in which they live and yet be able to understand and appreciate what the other sections have to contribute. It was the insuperable tendency to sectionalism at a period in the history of man when he was unable to think beyond rivers, or mountains or deserts or plains that divided Europe into a large number of warring tribes, perpetuated in the ceaselessly struggling nations of that continent today. America, north of Mexico and south of Canada, might have been divided into a half dozen or more countries and repeated another Europe.

The most potent force in solving this problem of sectionalism in our country must be the public's schools. Too often our political leaders promote these sectional jealousies and misunderstandings. Industrial leaders often deepen the trouble through competition of interests. The schools must so educate the people as to maintain the proper balance between sectionalism and national unity.

We are a people of diverse occupational interests. There must be understanding between our industrial classes on the one hand and our farmers on the other; our capitalists must sympathize with the problems of labor and labor with capital. We are a people of many languages, many religions, many cultural backgrounds and many political viewpoints carried from the countries whence we came.

The only human attitude that can possibly reconcile these widely conflicting points of view sufficiently to enable us to live together at all in peace is tolerance. Our nation has a right to depend upon the public schools for indoctrinating our children, and adults too, with a concept of the fundamental principles involved in real tolerance.

Our constitution guarantees to us certain inalienable rights, such as freedom of speech, assembly, petition and all those other freedoms up to that most priceless of all human rights, freedom of religious belief. Somehow our people must be taught that all such rights are purchased through sacrifice on the part of each individual. We ourselves lose these rights the moment that we deny them to others. They can be held only through insisting that they be the common property of all.

The fourth and final function of the public's schools is more intimately related to the purposes of the democracy itself.

The history of man is the story of his long and persistent struggle through the ages to attain certain inalienable rights. The purposes that impelled the establishment of this democracy were different from those that had dominated other governments up to that time. This new nation was established in the wilderness by our forefathers as a cooperative endeavor to secure for themselves and their posterity, as far as it might be practicable to do so, an unfettered opportunity for the pursuit of happiness. Other rights, such as life and liberty, were included in the objectives, but the right to pursue happiness transcended and included all others.

The ability to succeed in the pursuit of happiness is not innate in the human being but must be acquired through long and patient study. Therefore, the curriculum of the modern school gives a large place to those subjects and those types of experiences that mankind has long found to include the eternal verities of life, to satisfy the deeper longings of the

soul and to inspire to noblest achievement. Many phases of the curriculum are planned to help the individual to supply his needs in relation to his physical existence; other phases include the skill subjects which enable one to use his environment and deal with his fellow beings; still another phase has to do with the expressions of human beings that in one way or another constitute the culture of mankind.

It is the experience of the race that it is this last form of learning that has most to do with true happiness. It includes our religion, art, literature, architecture, music, games, drama and all other forms through which the noblest thought and emotions of each generation have been added to the social inheritance of the past and handed down through the centuries as man's tribute to his Creator and as his gift to posterity.

It is the function of the schools to give to every person, as far as it is possible to do so, the key to unlock and claim the riches that are the common possession of all who are willing

to pay the price. Unlike some other inheritances, this one can be claimed only by those who will prepare themselves to be worthy of it.

Only those who have acquired the techniques of interpreting, who have learned the meanings of the various languages through which the messages are spoken, who have attuned their eyes and ears, their thoughts and their emotions, to catch the messages that are all about us, only those can expect to succeed in this age-old quest for happiness.

Man will always go on and on in his eternal quest for happiness. No two persons will search for it in the same way. Some will find it while many will never come to claim even a small part of what life might mean for them. But this democracy and these schools have been established in order that every citizen may, as far as practicable, have an unfettered opportunity to achieve his own best self, that is, to realize whatever worthy talent or noble aspiration he may have with no other limitation than that which he sets for himself.

Six-Four-Four Plan at Parsons

THE public schools of Parsons, Kan., are this year operating on what is known as the "six-four-four" plan of organization. The new step in organization was taken at the opening of schools in September after the administration under Supt. Rees H. Hughes had been looking toward it for several years and after the board of education early in 1935 had given formal approval to the plan.

The school system for a number of years has had six-year elementary schools, three-grade junior high schools, a three-grade senior high school, and a two-year junior college, which was housed with the senior high school.

The six-year elementary schools remain undisturbed by the new arrangement. The two junior units, known as East Junior High School

(H. C. Rule, principal) and West Junior High School (L. M. Eddy, principal) now include grades 7 to 10 and the former senior high school and junior college (E. F. Farner, principal) is now combined into a single junior-college unit, including grades 11 to 14.

The new plan was instituted to afford a better service to the youth of Parsons through a simplification of organization, a strengthening of both junior high school and junior college units, an improved continuity of the curriculum and improved articulation within the whole system.

In putting the reorganization into effect the authorities are being advised by Leonard V. Koos, professor of secondary education at the University of Chicago, an advocate of junior high school and junior college.

"Without Fear and Without Research"

"A COURSE in the social studies is never made at will out of pure theory in a vacuum." Thus begins Chapter I of the 1936 Yearbook of the Department of Superintendence. The chapter reminds us that a social studies program is written by some person or group in a given time and place. The more realistic the program and the more effective it is in fitting pupils for life, "the more attention we must give to the essential characteristics of society." Perhaps if there may be said to be a primary theme to the yearbook it is suggested by this last quotation.

While the yearbook in no sense attempts to give a complete picture of American society, not even the casual reader can escape some notion of the social scene. Very early in the book (page 8 to be exact) we find in capsule form the principles "underlying the social studies curriculum and methods of instruction" which are "the necessary characteristics of democratic society and essential to the effective operation of American society in particular." An examination of these principles shows that they are the highly refined elements of the Constitution and the primary writings of the American tradition. Further details of group life and organization are developed in the subsequent treatment of the nature of society. Finally there is shown through specific examples of curriculum units the classroom presentation of the essential aspects of society.

Must Become "Eclectics"

For the second part of the primary theme—how may the learner best identify himself with the thought, spirit and practices of that society?—the 1936 Yearbook offers many suggestions. Among the most helpful sections is the review of current

social studies teaching cannot be undertaken, declares 1936 Yearbook

By CHARLES B. GLENN

schools of psychology and their respective contributions to learning. Apparently most of us, if we are not already such, must become "eclectics" who never lose sight of the necessity of helping the learner to find some meaning in a "blooming, buzzing confusion."

Freedom to Teach

Specific aids to teaching, at present the pariahs in certain educational circles, receive more than passing attention. Although not approving specific devices, the 1936 Yearbook obviously leans toward procedures that stimulate active pupil participation. Learners need to observe social processes first hand, to discover the problems, to search out the facts, to project tentative solutions, and to put their ideas into actual practice.

But if there is to be a realistic presentation of society, the teacher must have freedom to teach and the pupil freedom to learn. As the yearbook states the case: "Today teachers should have freedom to teach facts as they are, even though they are unpleasant to certain groups. Pupils should have freedom to face social issues as they are if they are to learn to be judicially minded." Teaching in this sense does not mean advocacy but the impartial and full exposition of facts to the end that thinking may be stimulated in the mind of the learner.

Needless to say the yearbook is not

a volume on sociology. It does not present a ready-made course of study in the social studies. It does, however, bring together theory, principles and examples of practice which should be helpful to superintendents.

Last November when the stratosphere gondola nosed itself into the soft farm land of South Dakota, the last message radioed by the pilots was "Very nice landing." Everyone breathed a sigh of relief. After a beautiful take-off and a magnificent flight these pioneers into the void had returned safely with new facts and data. The excursion into the unknown was essential for progress but the new knowledge could not be studied and utilized except upon terra firma.

"Happy Landings"

In recent years some of our educational literature has apparently taken flights into the stratosphere. Some publications have drifted away from earthly things and lost even radio contacts. Others have bumped along touching the earth at random spots until eventually grounded. Still other contributions have taken off beautifully, sailed along magnificently and reported: "Very nice landing."

Those of us who have worked upon the 1936 Yearbook sincerely hope that we have been neither too flighty nor too earth-bound. We trust that the yearbook will have many "happy landings" among those responsible for the improvement of the curriculum.

The Scholar in an Age of Conflicts

By CHARLES A. BEARD

ALL ABOUT us are signs of stresses and strains. East and West, war looms on the horizon, while the President and Congress of the United States seek ways and means of keeping the nation out of impending conflicts. At home 10,000,000 men and women search hopelessly for a chance to make a decent livelihood, and millions of young people hunt vainly for opportunities in which to try their talents.

In such a time it is fitting for us to inquire into the present duties and responsibilities of the teacher and the school in America.

The Teacher's Principal Business

The primary function of the public school system in American democracy is the training of minds and the dissemination of knowledge—knowledge useful in the good life, in the conduct of the practical arts, and in the improvement of American society.

For the training of minds, a trained mind is required. For the dissemination of knowledge, a mastery of knowledge is required. The union of the trained mind and knowledge makes scholarship. So the teacher is under obligation to be a scholar—not a pedant, but a scholar dedicated to the cultivation of the mind and the transmission of knowledge useful in the good life, the arts and the management of social affairs.

Many, no doubt, deny this conception of public education. They look to the schools to correct all the ills of humanity. Society creates conditions that foster crime; the schools must serve as crime prevention agencies. Society sends undernourished, ill clad and sick children to school; teachers must feed and nurse the unfortunate. Parents quarrel and fight at home; teachers must make saints

of children so trained at the fireside. Parents refuse to read good literature and insist on maintaining an intellectual and moral vacuum at home; teachers must turn the victims of the vacuum into wise and good men and women. Parents surround children with trashy newspapers, flashy movies and radio nonsense; teachers must overcome the distempers and follies of such a life.

Special interests in society demand this or oppose that; teachers must bow to the winds of these passions and pressures. Self-constituted professors of all righteousness think they have the way of universal salvation; teachers must force the creed upon the rising generation. These views of education run counter to my notion of its duties in American society.

Qualities of the Scholar

Accepting my conception of the public schools, what then are the qualities of the scholar—of the trained and well equipped mind? The first quality of mind required of the scholar in the humanities may be described as judicial. Some prefer the term "scientific." The scientist may be entirely neutral in respect of performances in the physical world. The student of the humanities cannot be so cold, detached and Olympian. His nearest approach to the scientific spirit is represented by the judicial temper.

The spirit of the judicial mind is the spirit of the quest for truth in cases particular and general. It is not given to mortals, apparently, to know the whole truth about anything, but humanity has found by long experience that it cannot live well without truth, without the knowledge that can be attained only by patient in-

quiry in the equitable temper. If the mind is closed and made up at the outset, then accurate knowledge and the utmost truth cannot be attained.

The judicial mind tries to look deeply into every subject in hand and all around it. The good judge must listen to things that are shocking and hateful to him, as well as to the pleasing and gratifying. He gives all parties their day in court.

Unless mankind is to surrender to utter irrationality and blind partisanship, unless the achievements of the scientific and judicial method are to be discarded as worthless, we must concede that the quest for truth in this spirit is indispensable to the conduct of private and public affairs, to the advancement of learning and to the improvement of life and society. Having taken this position, it is incumbent upon us to preserve and defend it as one of the obligations imposed upon the scholar as teacher.

Others may enjoy the luxury of imagining themselves omniscient and omnipotent; others may claim by partisan revelation the one and only truth, and assert the right to impose their will upon their neighbors and countrymen by terror, fire and sword. To the teacher this luxury is denied.

Defending the Scientific Temper

If the public schools are to aid in preserving American society against the fruits of unreason and the sneer of cold command, then they are compelled by the very nature of their function to assert and defend the judicial spirit, the scientific temper, against passion and tyranny.

But the judicial mind, the mind of the scholar, does not operate in a vacuum. It functions in American society. So we seem driven to the

conclusion that the knowledge disseminated in the schools should be knowledge useful in the good life, the conduct of the practical arts and the maintenance and improvement of American society. Then, what kind of knowledge can be deemed to possess such utilities?

Surely it must be accurate, realistic and relevant, not false and fantastic. It must be comprehensive knowledge—knowledge that takes into consideration the known facts and factors that are relevant to any subject, topic or theme in hand. At once elements condemned as “controversial” by the thoughtless are introduced into instruction. How could it be otherwise? Does anyone really believe that there can be a true history of the United States, for example, that does not deal with the great issues of banking, tariff, taxes, agriculture, industry and labor that form so much of the substance of American history and practice?

Yet it would be idle to suppose that the path of scholarship is smooth and easy. Teachers are mortals and find the way hard. And all around them are individuals, societies, organizations and associations, well-financed, strong in lungs, powerful in publicity. All around them are violent conflicts of ideas and interests.

If the foregoing conception of the schools and scholarship is accepted, then what is the next important step to be taken in the field of public education? It is, in my opinion, the clarification of the obligations of education, a definition of the relation of the schools to a society overmarked by conflicts of ideas and interests, a statement of the teachers’ responsibilities and rights, and the establishment of open procedures that will protect the schools against raids and enable them to fulfill honestly their transcendent duties.

It seems that we have reached a point in American life at which the maintenance of educational liberty can no longer be taken for granted. The precious values of liberty and scientific inquiry are threatened with extinction, and with them the princi-

ples upon which democratic government rests. From the field of constitutional law, organized education in America must borrow its guiding rules. In the light of constitutional experience, its immediate obligations are clear. They are:

1. To draft a national code of good practice for the teaching of subjects which in their nature involve or touch upon controversial questions—a code incorporating the fundamental liberties of press, speech and religious worship guaranteed by our constitutions.

2. To define the rights and duties of teachers and pupils in conducting classroom exercises.

3. To secure the cooperation of parents and school boards.

4. To provide rules of procedure for the examination and adjudication of specific cases of controversy.

5. To publish a constitution for the teaching profession, setting forth the principles, rules and procedure of good practice.

6. To educate teachers and the public in the liberties, responsibilities

and duties of inquiry, research and scholarship in American society.

7. To establish a national body, perhaps connected with the National Education Association, provided with funds and competent legal talent and charged with the duty of promoting and defending the rights of free scientific inquiry before the public and in particular communities beset by witch-burners and fanatics.

Divided and trusting to luck, we may be overcome by belligerent minorities; united we can defy powers that seem omnipotent. Let us study the problem. Let us clarify our minds. Let us set up a constitution of safeguards for scholarship, and devise processes for enforcing it. Let us rededicate ourselves to the American tradition of liberty and to the faith that error need not be feared when reason is free to combat it. Let us assert anew against brute force the values of independent scientific inquiry, of the unhampered search for truth, of the fair hearing and the fair play, and uphold them by fearless and united effort.

Figuring the Teacher's Load

By WILLIAM A. WARD

THE logical way to think of the teaching load is in terms of the time it requires per week. In order to estimate this, consider the following as separate items:

1. Figure the time per week spent in classes, study halls, home rooms and all other duties given a definite allotment on the schedule.

2. Allow about twenty minutes daily for each separate lesson preparation for the week.

3. Allow three minutes per pupil per class for the week for grading tests and other written work.

4. Allow reasonable time for coaching, sponsoring, pupil conferences or any other extra activities.

Find the sum of these four items and express it in hours per week.

The first is definitely set by the time allotted in the schedule. The twenty minutes allowed for lesson preparation is merely a suggestion. It can be varied to suit the particular case. Item 3 is to care for the difference in the teaching load resulting from large classes; the time for this will vary. The principal should be able to make a fair estimate of the time that the average teacher should put in on extracurricular duties.

Some think that in figuring the teaching load the relative difficulties of teaching different subjects should be taken into account. This matter is one on which it would be hard to find any agreement, but whatever decision is made, it can be cared for by increasing or decreasing items 2 and 3.

Education for Democracy

By J. W. STUDEBAKER

IN THOSE foreign countries where democracy is most virile, and the possibility of success for dictatorship is most remote—countries like Sweden and Denmark—the educational base is both broad and vital. This education is not merely vocational or cultural. It is concerned with “the pursuit of happiness” through democratic processes. Such educational programs are founded upon the proposition that democratic action must come from mass understanding of the problems the people face as citizens.

When a country has moved from democracy into dictatorship, there has been no such broad educational base for democracy as we find in Sweden today. Dictators are realistic and quick to understand how vital it is to control the educational process in the interest of a given social organization. They want obedience, unquestioning respect for their authority, ignorance of ideas contrary to their own and uniform agreement with their policies. They use the educational system to indoctrinate youth with their ideas and to train up faithful followers.

Indoctrination Begins

More important than terror and violence is the control of the means of communication and even of the details of the educational process. Teachers and professors who cannot be persuaded to indoctrinate in accordance with the desires of the dictatorship, are summarily removed and the most trusted disciples of the régime are given the responsibility of managing education.

Whatever else may be said of modern dictators, it must be conceded that they see clearly the relation of

education to social organization. They have with all haste and thoroughness organized education to make a major contribution to the authoritarian state. They have organized education on the assumption that the dictator should direct the “pursuit of happiness” and that the people should be trained to follow his directions.

The assumption in democracy is that the people shall be free to direct the “pursuit of happiness” for themselves. Democracy, more than any other form of social organization, requires a mass educational system for its perpetuation and an educational process which fits the social organization and contributes to its stability and growth. Here, I think, we must make a careful distinction between education for democracy and education under dictatorship.

Fatal to Democracy

While the technique of planned and persistent indoctrination is a good one for the social organization of dictatorship, its widespread use is fatal to democracy for the point of view to be indoctrinated is certified by the leaders of the totalitarian state. The object of indoctrination in this case is to induce people to hold the prescribed opinions and thus become satisfactory citizens.

When the process of indoctrination is applied in a democracy, it has no legitimate point of reference in the social organization itself. Its point of reference must be some faction within the democratic social organization. That is to say, the system of education becomes the propaganda agency of some faction. When this happens, education becomes the enemy of that society and contributes to its early dissolution.

Why do modern peoples in a period of crisis tend to discard the rights of democracy for the authority of dictatorship? Commissioner Studebaker suggests one of the important causes.

The social organization we call democracy is based upon two important principles. First, that the majority shall determine the policy with respect to any given issue at any given time; second, that the right of the minority to attempt to become the majority through the use of free speech, free press and free assembly shall be assured.

The educational system cannot be used to indoctrinate the learners with respect to the social, economic and political issues upon which there is a difference of opinion, without either violating the democratic rights of the minority by acting as the instrument of a majority faction, or violating the rights of the majority by acting as the propaganda agency of a minority faction. If public education is used as an instrument of indoctrination, the dominant factions in our society will dictate the process.

Organizing for Self-Government

Organized education must have a point of reference. Ours is democratic self-government. I think we should analyze our educational process critically and frequently to see whether it is actually functioning efficiently as a bulwark of democracy. This is more important to my mind than our more usual inquiries concerning over-

crowded classrooms, efficient budget organization, and many other problems of school management, none of which should be neglected.

I am contending for an educational technique that actually prepares and assists people, not only as children and adolescents but as adults, to function effectively in democracy. It has little to do with the "pep rally." It places no particular emphasis on constantly arguing the theoretical merits of democracy over any other form of government.

It is a technique that starts in the kindergarten and is applied in all learning processes through middle life. There is no particular formula by which it may be put down in a sentence or two. Rather it is characterized best by the philosophy of democracy that gave it birth. It is described partly by the term "scientific approach" and partly by the term "discussion method." It induces critical inquiry and the habit of validating conclusions.

Classroom Authoritarianism

In any case, its purpose is to respect personality and to nurture it rather than to consume it, to liberate it step by step, to let personality operate at peak capacity in the social situation rather than to regiment it to respond automatically to given signals.

There is still too much authoritarianism in the classroom. In some secondary schools teachers play the rôle of the drill-master. They think they are teaching history or mathematics or English, but they are training human beings to goose-step and failing to help them to grow up into independent self-respecting, self-disciplined citizens.

The place to stop the growth of attitudes that prepare people to be satisfactory cogs in the great machine of dictatorship is in the classroom of the public schools.

Closely linked with this weakness is a tendency in some quarters, because of theories and of pressures upon school authorities, to mix up education with the idea of indoctrina-

tion. We have made the transition from the old democracy of the pioneer period, when emphasis was on the tool subjects, to the new democracy of highly complex social organization where the emphasis must be on social understanding. There is no discussion of the correct answer to the problem of two plus two. But what trouble we get into when we take this word "teach" over into the area of controversial subject matter dealing with social relationships!

We have yet to clarify for ourselves and for the community at large the meaning of the word "teach" when applied to the debatable, to the controversial, to social philosophy. This confusion is a definite weakness in our educational structure which has been seized upon by the propagandists and may be taken advantage of by a whole faction eager to control or prejudice the thinking of the oncoming generation.

If we honestly believe in bringing youth to intellectual maturity instead of standardizing people by a process of indoctrination, we will give special attention to clarifying our position on this point and devote real energy in the defense of teaching as a process that impartially guides and encourages freedom of inquiry and self-validation of conclusions. It may as well be known first as last that the teaching profession of America is not to be bribed by appropriations or frightened by attacks into acting as the carriers of propaganda for any faction, vested interest, political party or pressure group.

Teaching Vital Questions

There is a tendency to avoid relating teaching to the present-day world and its problems. Perhaps if we could get a clearer view of the function of teaching in the social studies field, we might be less timid in bringing youth and adults to grips with present-day problems.

When the educational system in a democracy avoids the questions and problems of most vital significance to society, it demonstrates that it has lost touch with its point of refer-

ence. For if there is one thing that a democratic public enterprise in education should foster and develop, it is the ability of the learners to cope with the real issues concerning the social situation.

No matter how well we prepare people in the skill of figuring sums, writing essays, typing and bookkeeping—no matter how well we do these things—we fail in a large measure in our essential responsibility to democracy if young people leave our secondary schools without well developed habits in the study and discussion of controversial issues. If the educational system avoids these issues it must be responsible for shunting the real problems into the arena of mass emotion where the inexperienced person may easily be caught in a whirlpool of words to accept unquestioningly the first crackpot scheme offered as an answer to a complex social question.

Civic Education for Adults

We have failed to plan the educative process for communities as a whole involving civic education for the vast majority of adults.

Adult education gives us the great opportunity of engaging the active interest of the people in our communities in public education generally. Through this contact we can develop that community understanding which is essential to the vigorous consideration of present-day problems in the classroom.

As our machine civilization has become more complex, new techniques for simplified propaganda have been developed to the point of a science. Those who know the tricks of publicity and the art of mass organization can wield an influence far greater than their understanding of the problems they presume to answer. This is no time for the educational process to retreat from real issues and thus leave people prey to factionalized propaganda. The test of democracy in America will be found in the extent to which the educational technique can frustrate appeals to prejudice, fear and crowd emotions.

Three Views on Federal Aid to Schools

CHARLES H. JUDD GIVES AN OPINION

THE history of federal grants made to education in the states is, on the whole, far from encouraging. Some of the grants have been administered incompetently or even corruptly. Some of them have seriously disturbed the equilibrium of the educational systems of the states receiving them. One conclusion is perfectly clear—federal grants create complications that should not be lightly overlooked.

The National Advisory Committee on Education, appointed in 1929 by President Hoover, while it was opposed to the type of federal appropriations made in the past for the encouragement of special forms of education, was unable to reach any decision as to the extent to which the federal government should contribute to the support of schools or as to the method of distributing federal support if such is provided. It therefore recommended a thorough national educational finance inquiry.

Grave questions with regard to the state administration of federal grants arise because of the inadequacy of many of the state departments of education and because there is no entirely satisfactory plan of distribution even of state funds for education. The State of New York, which has been held up as a model, finds it necessary to make a new and thorough study of the efficiency of its schools and of the administration of its state educational fund.

The reason most commonly urged for federal contributions to the support of schools is that the states are unequal in their wealth. Added to

the inequality of wealth is the further complicating fact that state systems of taxation are very different and for the most part archaic. Some of the states are so poor and others have such antiquated systems of collecting revenues that they are unable to provide satisfactory education for the children who grow up within their borders. The taxing systems of many states cannot easily be changed because they are either prescribed by the constitution or tenaciously retained through the influence of large taxpayers.

In the light of all the circumstances and because of the apparent necessity of federal aid to education, it seems wise to experiment with a modest sum of federal money distributed through a commission which shall have discretion to allocate this money where it is needed in order to equalize educational opportunities. For the purpose of making the nation more fully aware of its educational problems, it is certainly desirable that the facilities of the U. S. Office of Education for the collection and critical interpretation of facts

with regard to education in the United States be greatly increased.

If it appears after trial that federal support is necessary on a large scale and for all the states, there should be in the law making the grants definite stipulations as to the general lines along which improvement of schools must be assured. The states should be required to guarantee that schools will be conducted through a reasonable number of months each year. They should be required to pass adequate compulsory school attendance laws and to enforce these laws without discrimination against any individuals on account of race or color. Other requirements no less reasonable should doubtless be imposed by the law making the appropriations.

At the present time there is an obstinate determination in some quarters to demand, and if possible secure, federal support for education without supplying any guaranties whatever that there will be improvement of schools. It is certainly to be hoped that mature discussion of the various plans proposed will modify somewhat the attitude on the part of those educators who are determined to resist all federal demands for improved education.

AS L. D. COFFMAN SEES THE PROBLEM

THE most important document ever issued in this country dealing with federal support of public education was the report of the National Advisory Committee on Education in 1931.

This commission favored the use of federal funds for education; it dis-

approved federal laws that provide the matching of monies; it opposed giving federal authorities the right to approve or reject state plans; it called upon the federal government to restrict all of its grants for special types of education; it urged that studies be made to determine how

far and by what methods the federal government is justified in using the federal tax system to supplement state and local funds in support of public education; it requested that all future grants to states be made only after thorough educational studies have shown to the satisfaction of the appropriating power that such federal aid is justified, that future grants be apportioned on the basis of need rather than in terms of an equal amount for each state and that such grants be subjected to review every ten years; it advised further that federal control be restricted to audits of the funds, and finally it recommended that more liberal appropriations should be made to the Office of Education for educational research and information service for the improvement of the various types of education in the states.

Nothing has happened in the last five years that would materially change these recommendations. But in view of recent events, it is imperative that we renew our faith in these principles.

From colonial times down to the present, one of the most powerful forces and traditions in America has been local responsibilities. Now it is maintained that local autonomy has outlived its usefulness. The states have assumed more authority and the federal government has grown more powerful. In the desperate struggle to achieve economic security, Americans are face to face with the ever constant danger, rendered more acute during a financial crisis, of losing their liberties and of restricting unnecessarily their opportunities.

The growth of authoritarian government in the pursuit of security has affected every community and touched every individual institution in this country. Education has certainly been included within its purview. With the passage of the Morrill Act in 1862 and since then, in a succession of acts, the federal government has assumed a directive control of specialized types of education, and more recently over other aspects of education.

The National Youth Administration with its laudable general aims and purposes is being administered in a manner that is questionable. It is divorced from the existing educational agencies; it is administered by persons who qualify primarily because they belong to a particular political party, and it is controlled by a central office which determines the policies for all states. These conditions certainly create a presumption in favor of the political domination of the schools. It would be an easy step from this to a situation in which the materials of instruction would be suggested and thus required from Washington.

Similarly, there has been an increasing tendency on the part of the federal government to dominate, through the use of money and power, certain aspects of the higher educational program of this country. This tendency became lusty and vigorous with the passage of the Bankhead-Jones bill, which makes available large appropriations for the land-grant colleges for research, resident instruction and extension.

The bill provides for the establishment of regional laboratories to carry on researches. What shall be studied at the laboratories, the length of time that the laboratories may exist, the amount of money each shall have, and the personnel are all determined in Washington. The resident instruction likewise must be in fields specified by the bill or by those in charge of the administration of the act. Even more obvious is the dictation of the

federal government to the uses that the land-grant colleges are expected to make of the extension funds.

While the federal government is appropriating considerable sums of money for education in special fields, it is providing no money for liberal education and no money to train the young people in the exercise of their powers as self-governing citizens.

There are only three ways that they can go: Move in the direction of greater federal control, which means more regimentation of life; move backward to the days of absolute free choice and personal independence which, I am convinced, are and should be gone forever; or insist upon a steady course of preserving our theory of government of checks and balances—a theory essentially and uniquely American, which provides that government shall be voluntarily determined and voluntarily altered to meet changing conditions but which, never at any time, shall permit unlicensed liberty on the one hand or absolute domination on the other.

Such a government will distribute funds according to educational needs for the purpose of ensuring insofar as possible a knowledge and mastery of the things citizens should know and understand in discharging their duties as citizens. Such a government will provide liberally for the study and dissemination of information about education in this country and abroad. Its leadership will be intellectual, not partisan; and the children of the nation will be regarded as future citizens, not as wards of state.

STAND TAKEN BY PAUL R. MORT

THE national welfare demands federal interest in public education. The economic and social benefits of adequate public education are not limited to the individual community or to the state. Neither are the liabilities of inadequate public education so limited.

The evidence points to the conclusion that advancement of education

in states now at the lower end of the expenditure scale must involve financial support. The poorer states cannot finance an adequate minimum of educational opportunity. Ashby's investigations show that the entire yield of a reasonable tax system would be taken to support a defensible foundation program in the poorest states.

In addition, federal support for a foundation program of education may be used to facilitate the broadening of the tax base for the support of education. Such broadening of the tax base is necessary for the improvement of the structure of school finance in states all up and down the scale of ability. There is evidence that this result can be attained by federal action more readily and equitably than by individual state action.

The question is not should federal aid be provided, but how should it be provided?

A general framework for federal support can be based on the experience of states in improving their support systems since 1920. A foundation program should be defined. Support should be made available that will make possible this foundation program in every state without overburdening the tax resources of any state.

What Kind of Control?

The chief point at issue is the question of control. How much control should be given to the federal government? What kind of control?

At one extreme we would have the position that the money to be distributed should be placed in the hands of an authority at Washington which would lay down specifically the hurdles to be jumped by the states and would assure for every dollar spent a dollar's worth of improvement, as defined by such authority.

At the other extreme, we would have the position requiring the definition on a mathematical basis of the way in which the amount of aid to be granted by each state would be paid. It would have the amounts computed and paid by the states without any condition save the reporting of uses made of the funds for publicity purposes. In between these extremes would lie various degrees of central control.

Doubtless many school men and laymen would at first thought find the former extreme by far the more attractive. On further thought he is likely to become skeptical as to

whether or not this, in the long run, would be more efficient. He is likely to doubt the ability of any centrally located board, however benevolent, to decide what is best for every isolated community. He is likely to wonder whether this would not lay the schools open to control by political or other pressure groups.

In going toward no control, he might first insist that the decision as to how much money a state obtains must not be left to the judgment of any central group but must, rather, be determined on a mathematical basis set in the law. He will thereby avoid discretionary powers which provide the open door to unpredictable controls. He will dally a while within the realm of specifically defined controls. He will consider the possibility of requiring certain improvements which nearly every one agrees are desirable, such as a minimum expenditure on schools for Negroes, a minimum school term, a denial of the right to lower present expenditures by states and localities. He will accompany such possible controls with a check-up by the government at Washington which will result in the denial of further aid to states failing to make such improvements. This he may not find particularly objectionable since the control involved is delimited.

Support But No Control

But he may ask himself why it is necessary for Congress to tell the states that these simple minimums are desirable. What state is there that does not have in its educational and lay leadership an understanding of such simple correctives as have been mentioned above?

If he allows himself to ask these questions, he may answer by saying that such controls are superfluous—that all that is really required is a statement of the purpose in the act, a periodical survey of what is happening in the states as related to these purposes, and a report to Congress and to the public of how well the intent of Congress is being carried out. For an effective expendi-

ture of funds he will depend upon the fact that inefficient use will tend to keep the program begun on a low level from expanding to a high level or may even result in repeal.

Such reasoning leads me to the position that federal support should be associated with no control. The amount of federal aid to be granted states should be determined on a mathematical basis, defined in the law. The only condition that should be set for receiving aid is a report of its use after the fact, which may be used by Congress and the public in appraising the contributions that the federal aid makes toward the purposes of the act.

Proposes a Foundation Program

Studies¹ that are designed to set up a federal support program along these lines have been completed. These studies envisage (1) the ultimate guarantee of a foundation program of the type that could be purchased for \$60 per pupil in an elementary school in the year 1930-1931; (2) the equitable distribution of the burden of such a program, and (3) the possibility of the federal government operating as a collector of the newer types of taxes and eventually making available to states, rich and poor, the yield of such taxes, distributing to all the states, in proportion to their ability, available funds not necessary for the equalization of burden of a defensible foundation program.

As a first step, these studies lead to the proposal that a foundation program costing \$15 per elementary pupil in attendance, or \$10 per census pupil, be equalized. Approximately half of the cost of such a foundation program in each state would be paid by federal aid. The support of the other half would be shared by the states in proportion to their ability to pay taxes. These studies develop means by which these steps can be carried out without involving control.

¹Mort, Paul R., and Others, *Federal Support for Public Education*. New York: Bureau of Publications, Teachers College, Columbia University. (In press.)



Welding Class Wins Praise of Labor and Public

By ROBERT D. HENDERSON

THE Alhambra Union High School of Martinez is centrally located in the fast growing industrial district of Contra Costa County, California. Within a radius of a few miles are the Shell, Associated, Union and Standard Oil refineries, the California-Hawaiian sugar refinery, the Selby smelter, the Shell and the General chemical companies, Bethlehem Steel, Johns-Manville, and across the bay the Mare Island Navy Yard.

This location is an ideal setting for trade classes of certain types. Employment is assured for graduates of

these classes provided they have been well selected and have been given a broad training in the basic principles of their trade and the highly important related subjects.

Some years ago a survey of the industrial district was made to determine whether or not it would be advisable to start a welding trade class. The survey showed an excellent field for employment for those having a knowledge of welding as it is one of the leading trades of the district. This

review was brought to the attention of the state department of vocational education, which recommended that a welding class be started.

The boys were carefully selected as to aptitude and were given a physical examination with particular reference to eyes, heart and lungs. Many firms that employ welders require the men to pass a satisfactory physical examination before employment is given. This narrows the line of employment to such a degree that

This welding trade class at Alhambra Union High School has accomplished some remarkable jobs, including an addition to the school heating system. Here are shown some of the boys installing the last piece of insulation around a pipe. On the opposite page boys are doing shop work.

the boy who is physically handicapped is not encouraged to join the class.

The type of classroom work known as Related Subjects is divided into the following divisions: mathematics, drawing, physics, chemistry, metallurgy, safety regulation and first aid. Interwoven closely with these subjects is the highly important social adjustment program.

A pupil entering the class is given preliminary examinations in mathematics and started where he can understand and do the assignments. During his first year his studies are of a general nature. In his second year, his real trade mathematics starts and he is gradually brought through the different stages so that by the end of his senior year he has mastered enough to carry him through as a journeyman mechanic.

Drawing is not carried out as a mechanical drawing course is, but starts with the understanding and making of simple work sketches and gradually develops so that the pupil at the end of the course understands and reads blueprints and is capable of making all necessary work sketches that may be needed on the job.

Physics and chemistry are of a fundamental nature; only the parts necessary to the trade are taught.

Metallurgy, as it deals with weld-

ing, is given. The tabulated list that follows gives examples of the items included in this study:

1. How metal reacts under heat and cold.
2. Why certain procedures are necessary on different types of jobs.
3. Why special rod is used.
4. Why certain alloys give best assurance of perfect results.
5. Why some jobs are failures and some successes.

Safe practices and regulations as to the welding trade and to the indus-

trial world as a whole are taught throughout the course.

First aid is taught as a regular subject. The Bureau of Mines course is used as a text.

Social adjustment from a broad point of view really teaches the pupil to work harmoniously and deal fairly with his fellow workers.

New pupils are taught the names and uses of the entire equipment, and on this they must make a perfect grade. They are then started on the simplest procedures of welding and must know them well before they are



passed on to the next higher type of job. The completion of a well outlined three-year course is required for graduation and recommendation.

The board of trustees and the administration have cooperated with the department to the fullest extent by furnishing funds and providing jobs. Real jobs keep the pupils more interested than the deadly grind of practice. An ideal learning situation is thus set up, and the pupil does his best because he is working on something that will be used.

At the time the class was formed, the Martinez Local No. 11 of the Association of Certified Welders was consulted, an explanation of the aims of the course was presented and their cooperation and approval were asked. The request was granted and a trade board was formed. This board consists of two journeymen and the class instructor.

A system of progression requirements was worked out and examinations at regular intervals were planned. All phases of the pupils' work are carefully gone over by the board members. This assures the pupil of a good practical course of trade value and also of a related course that gives a broad background not only on the trade but on industry as a whole.

Projects Accomplished by Boys

One of the first major projects undertaken was a welded pipe fence around both ends and one side of the football field and track. As the cost of new pipe was prohibitive, it was decided to use second-hand boiler tubes. The purchase was made through the Shell Oil Company, and the job was started. A complete layout plan was made and followed through to the fraction of a degree.

All posts were cut and set in concrete at intervals of 12-foot centers. This presented quite a problem as the line was on a general curve and the positions of the posts must be accurate.

Next came the railings. Several lengths were welded together and with the help of an "Old Man" were bent to the exact arc of the post line.

These were then set on top and welded in place, care being taken to reheat all joints and backs to overcome warping. After all welding was done, the entire 1,000 feet was gone over with wire brushes and given two coats of paint.

Several sprinkling systems have been installed at both the senior and junior high schools. As usual all plans and details were worked out before the project was started.

Mechanical Drawing Tables Made

Careful selection of boys to do outside jobs is always considered. One outstanding boy was appointed foreman of this job, the new boys serving as helpers. All are required to write the project as an assignment. Many characteristics appear from this type of work and it is easily seen how far a pupil has progressed in many lines of his related work.

In making a complete set of tables for the mechanical drawing department, the problem of accuracy in construction was nicely demonstrated. Every measurement was exactly scaled and materials were prepared accordingly. In welding the framework of these tables every precaution was taken and certain welding procedures were followed. The results were satisfactory and an excellent product was produced.

Many smaller jobs are continually being done. This gives the senior pupils the real experience of the average job shop. By studying the individual piece of work and doing it, the pupil gains a broad understanding of the welding industry.

The converting of line driven lathes to individual drive for the machine shop presented several interesting problems in welding construction and were carried out successfully. This type of project called for both oxy-acetylene and electric welding and was one of the best problems presented because it offered a wide range of experience.

The same shop supplies us with many small jobs of a great variety in bronze, cast iron, malleable iron and steel.

A complete set of field equipment such as hurdles, high jump standards, pole vault standards, field marker and shot put rings, have been made for the physical education department. A light tubing with wood cross bars was used and resulted in a product that will stand the necessary hard usage to which this equipment is put.

During the time all these jobs were being done, our own shop was being developed. Welding and cutting tables, layout tables, steel work benches and many of the tools used on the different jobs were made in the shop. The shop was headquarters for the outside crews. When these boys wanted something special made for their own job they either had the shop crew make it or came to the shop and made up the special article or tool that was needed.

Class Adds to Heating System

An addition to the school heating system is the major project undertaken by the shop. Many persons advised against the boys doing this work thinking it was beyond their ability. But, with the cooperation of the administration and the board of education, the class was allowed to start planning the work. Measurements were made and bids for necessary material were called for. In planning the job all pupils became acquainted with all steps necessary to make an accurate estimate on this type of installation.

The pipe required was 500 feet, 6 inch; 150 feet, 4 inch; 300 feet, 2 inch; 1,600 feet, 1½ inch, and 500 feet, 1 inch, with all the necessary valves and traps. All the pipe required insulation, and 150 feet of waterproofing with tile covering was used underground between the buildings.

Holes were cut in the main and wing foundations along the proposed line and the connections to the main steam line were made in the old furnace room, centrally located under the main academic building. Toward the furnace room we had fairly good head room, about 30 inches, but as we worked out toward the side of the

building, it became rather cramped and we were forced to work lying down.

All radiators on this side of the building were connected to the new line. All work was completed as we progressed toward the outside wall.

Just outside, a crew was digging the trench and tunneling under a 10-foot sidewalk. Here, water lines and storm drains were encountered. This forced us to go deeper than was planned. The low spot was taken care of by installing a drip valve. The welding of the pipe in the trench was comparatively easy and good progress was made.

In coming through the foundation and under the gymnasium building it was necessary to rise a few feet to clear a maze of water and electric lines. In this corner the radiators of the home economics department and the coach's office were connected to the main line. The main line runs at an angle of 45 degrees to the building for about 100 feet, then parallel for the remainder of the distance under this building.

As we progressed, the radiator lines for the boys' and girls' showers were connected. Very close working conditions were encountered under this building but, in all, fairly good time was made.

Under the driveway between the gymnasium and the machine shop heavy reinforcements of boiler plate were placed over the tiling to protect it from the hazard of heavy loads.

The main line in the shops was located near the ceiling and was run across the machine shop motor laboratory into the welding and metal shop. Radiators, fourteen in all, were installed.

All exhaust lines were returned in the same general direction taken by the steam line coming out. The necessary traps were added and all hammering was eliminated. After all tests were made, the line was insulated and one coat of sizing and two coats of paint were applied. The job was complete.

To celebrate the completion of this project the welding class was honored



After the boys had installed the last radiator in the school heating system extension, the class (shown below) was honored at a dinner attended by members of the board of education and the principal.



by being served a dinner prepared by the cooking class. This was attended by all members of the board of education, the district superintendent, the principal, the welding class and their instructor. The boys received

many compliments on their work and enjoyed a pleasant evening.

Each boy's parents received a letter of commendation on their son's work, signed by members of the board and the district superintendent.

Ten Vital Issues

By THOMAS H. BRIGGS

FOUR years ago the National Department of Secondary School Principals appointed a committee on the orientation of secondary education, which has just made a voluminous report on the ten issues that it thinks are of most importance.

These ten issues are merely enumerated here. Some of them will seem to be more important than others, as indeed they are, but no one can be neglected, each having important implications for directing practice not perhaps at first apparent. Some of them will appear to many who have their minds already made up no issues at the present time, but they are nevertheless, and neither the arguments on the other side nor the contradictory practice can safely be neglected. In reflecting on any one of them you should keep all the others in mind, for there is among them an interrelation that cannot be ignored.

What the Issues Are

1. Shall secondary education be provided at public expense for all normal adolescents or only for a limited number?

2. Shall secondary education be concerned with the welfare and progress of all individuals or only with those who promise a profitable contribution to the supporting social and political organization, *i. e.* school district, county or state?

3. Shall secondary education continue at public expense for all adolescents as long as they elect to attend school or be limited at the discretion of school authorities?

4. Shall secondary education provide a common curriculum for all, or differentiated offerings?

5. Shall secondary education provide vocational training?

6. Shall secondary education have primarily in mind preparation for advanced studies, or be primarily concerned with the value of its own courses, regardless of a pupil's future academic aspirations?

7. Shall secondary education consist of unit courses, usually of one year or of one semester in length, each with its terminal examination, or of interwoven courses with periodic comprehensive examinations covering cumulative interrelated knowledge and the ability to apply it?

8. Shall secondary education seek merely adjustments of pupils to common life practices, or the improvement of these practices?

9. Shall secondary education present merely organized knowledge or also assume responsibility for attitudes and ideals?

10. Shall secondary education be merely a part of a "gradual, continuous, unitary process," or a distinct and closely articulating part of the entire educational program with peculiarly emphasized functions of its own?

Next Steps in the Program

The first step that every professional educator should take is to ponder over the issues and the arguments for each alternative until he has made up his mind which one must be approved as an ideal. If he is a leader, he will involve in such a study as many of his professional subordinates or of his colleagues as possible.

Once an alternative has been approved, the implications must be found. Some of them are obvious; others are so difficult to discover that they will bring inevitable discouragement; the challenge will be so great that individuals or small groups will

tend to be paralyzed by a feeling of helplessness. Such a state of mind is encouraging and highly to be desired.

Every individual or small group should go as far as possible toward answering each one, but ultimately they must more completely be answered by groups of experts who will be given plenty of time and abundant resources. All the tentative answers of all the educators who concern themselves with these problems will contribute immeasurably not only to their own professional growth but also to the power of the expert groups to propose better ones.

In the meantime every administrator and even every classroom teacher who studies these issues and attempts to find the implications and to answer the questions raised by them will realize some justifiable changes that are desirable in his own work.

A Job for Experts

Another step that should be taken by educational leaders, whether they are administrators or teachers, is to acquaint the public with the issues and their implications and to make them concerned about the program of secondary education, as it is and as it ought to be. We can scarcely expect the public to give wholehearted support to any proposed innovation until it has been made intelligent about it.

After each professional individual or group in any community has done all that is possible, there will remain the major job of constructing a new program for the care and education of youth. This requires ability, effort, and time not possible from any group, especially when already occupied with the immediate necessity of doing a full day's work on the regular job. It must be done by wisely selected experts, representative not only of education but also of all related fields. They must be employed for full time and given ample resources and help to lay sound foundations and to make plans for the entire general structure.

Turning the Spotlight on Rural Education

By AGNES SAMUELSON

THE experience of the last few years, both here and abroad, has validated all that is in our basic American tradition as to the rôle of education. It has demonstrated that democracy must preserve education so that education may preserve democracy.

The lessons of this critical period are clear with respect to the urgency of implementing education for its continuous task of making democracy work. They teach that democracy is education in action. They point to vigilance in keeping education unshackled, if the basic principles underlying our republic are not to be surrendered.

The situation calls for the formulation of a program of action built upon clear policies of American public education. Guiding principles are necessary at all times, but especially in these days when profound social, economic and political changes are taking place. This is a task requiring educational statesmanship of the highest order. It behooves all of us in every community and state to examine our working program in terms of the general welfare of all the people and the equalization of educational opportunity for their children.

Educational Program Incomplete

This cannot be done without turning the spotlight upon the educational needs of that portion of our school population living in rural areas. No program of education is complete that fails to provide comparable educational advantages for all the children regardless of their geographical location, social status, economic condition, physical disability or any element limiting their development.

No more frontiers beckon youth to new territory. Cities are becoming overexpanded and a sizeable exodus of unemployed families from the cities into the country is taking place.

Certain other conditions now facing our farm people threaten their ability to continue their vital contributions to general welfare. Some of them have to do with farm income, home ownership, commercialization of agriculture, taxation and the burden of rearing and educating children.

Half of Farmers Are Tenants

It is not news to say that the income status of farmers since 1912 has been all but favorable. Recent figures may tell a different story, but in 1929, while about one-fourth of the nation's population lived on the land, they enjoyed only about one-eighth of the nation's income. Out of this gross income about one-third went to the cities through migration of population, payment of interest and rent to city dwellers and settlement of country estates going to urban residents. Approximately one-third went for wages, taxes and various items purchased from industry. Thus only about one-third was left for the maintenance of living standards in the home.

The number of farmers no longer owning the land they till has been increasing for the last thirty or forty years. The U. S. Department of Agriculture reports that the percentage of farmers who were tenants increased from 28 per cent in 1890 to 42 per cent in 1930. There is reason to believe that this percentage has now reached the 50 per cent mark.

Another tendency during the last thirty years has been to convert agri-

culture into an industrial and commercial enterprise rather than a mode of maintaining the social and economic life of a family unit. While agricultural economists seem to agree that to a certain extent farms must be commercialized and resort to mechanical means of production, they say it is equally desirable that the best elements of what may be termed live-at-home agriculture be maintained.

The problem of obtaining adequate governmental services and at the same time of controlling the steadily mounting general property taxes has become serious. In 1929 the percentage of the farmer's income going for taxes was 13 per cent, or nearly one-third more than the average for the nation. Recent studies have shown that, in spite of decreased assessments and reductions in tax rates during the depression, the farmer's taxes in ratio to his income and the value of his land have increased.

Tax Burden Is Heavy

These burdens become all the more onerous in view of the fact that the per capita income of farm people is usually only from one-third to one-half the per capita income of the entire nation. It is quite evident, therefore, that if public services such as state and local government, public schools, health service, adult educational enterprises and the like, necessary to an adequate standard of community living, are to be maintained, grave consideration must be given to public taxation.

In 1930 about 21 per cent of all women of child-bearing age were living on farms, but from this 21 per cent came 29 per cent of the nation's children. As a result of this condi-

tion we find that the typical farm sections must support more than one-third of their population in the school as compared to less than one-fourth for typical urban areas. During the years 1925-1929 the farm population received about one-tenth of the nation's income, comprised about two-tenths of the nation's women and nurtured about three-tenths of the nation's children.

I choose to call this the 1-2-3 ratio. It serves as a practical means of calling attention to the obvious fact that if two-tenths of the nation's women are to be responsible for the three-tenths of the nation's children, they should certainly enjoy more than 1 per cent of the nation's income, and are certainly entitled to at least three-tenths of available opportunity for education and health protection of their children.

Implications of These Problems

These are not all of the major problems facing our farmers in their effort to make a living, maintain schools for their large share of the nation's children and attain a more satisfactory way of life. They have been given because they stand in the way of the farmer's continuing to make his distinctive contribution to the future of American civilization and to provide his children with adequate educational opportunities. They are inevitable considerations in planning next steps in general welfare and educational progress.

The implications for education are far reaching. These facts must be reckoned with whatever type of organization you advocate for rural areas. Whether you believe the one-room school still serves the needs of twentieth century children or is fit only for a place in a museum along with the old spinning wheel, these impending conditions cannot be disregarded. They have a direct bearing not only on all aspects of rural culture, including schools, but also on the total educational program, urban as well as rural.

The march of equalization is halted as long as one-eighth of the children

live in school districts without funds to keep schools open the customary term. While the immediate effect of that calamity is felt by the children, the ultimate result will react upon our whole social structure. It is delayed as long as education in any area of our land is out of balance.

The plain task is to catch up with our unfolding ideal of educational equality, to make good on the educational birthright guaranteed every child. Translated into concrete terms this means the provision of the essentials for all children as they are represented by a term of minimum length, school building and equipment adequate for proper working efficiency, a program enriched to meet changing needs and extending through the secondary level, and a teacher trained in her craft. It also includes lifelong education for their parents, since education is a process continuous with life and not something that begins automatically at the fifth birthday and ends abruptly at the age of twenty-one. The schoolhouse should be a service station for the procession of humanity, old and young, on the highway of life.

Purely a Question of Funds

The situation in rural areas and in other sections where there are underprivileged children is not due to indifference on the part of the parents toward the importance of education, nor to the children's lack of ability nor to lack of vision by their professional leadership. There are no more faithful workers in the field of education than those who labor in the cause of country school children. They recognize the needs and in many places have as advanced programs as may be found anywhere. It is a question of funds.

The facts given as to the unfavorable financial position of the farmer and his large financial contribution to general welfare lead to an inevitable conclusion. All of the scientific studies of the needs and conditions point in the same direction. The only way by which adequate school facilities can equitably be made available to all

children is through federal action. It cannot be done through local effort alone, nor even by all of the states acting at one time.

The support of public schools is no longer a matter of local concern only. People migrate from the districts supporting the schools they attend. National wealth has been concentrating in certain congested centers of population. The wealth produced in all sections of the country tends to drift to the Eastern seaboard. Build a wall around any urban community and it will soon collapse without the inflow of farm products. Truly the welfare of the whole people is wrapped up with that of the farmer. Collect the funds where the money is and spend them in educating the children where the children are. That is the alpha and the omega of the whole matter.

Federal Aid for Minimum Facilities

The states and the nation must assume a larger share of the financial responsibility of schools, if education is to undergird our social structure and implement our democracy. Equality of opportunity rather than equality of expenditure should be the unit of service. Road building did not wait upon local support when its social and economic values became obvious. The same is true of scores of activities now being subsidized by federal funds in the interests of general welfare.

The advancement of schools in any area of our country must not be delayed because of the inability of that area to provide minimum facilities. The challenge to educational leadership is to join in a unified program that will allow no forgotten children, no dark spots on the educational map, no departure from the principle of equality of opportunity that distinguishes America.

While financial genius is fashioning the economic structure that will safeguard agriculture as a mode of living, it behooves us to recognize that the future welfare of the nation is interwoven with the welfare of the children of our farm homes.

Accent on Youth

By HOMER P. RAINEY

THE American Youth Commission was established under the auspices of the American Council on Education and is commissioned to undertake an extended inquiry into, and to formulate comprehensive plans for, the care and education of American youth. The commission is instructed also to endeavor to integrate contributions that have been made or are being made for the solution of this problem, to stimulate new contributions in fields hitherto unexplored, and to encourage translation of the best that is known into practice on a nationwide scale.

Hence the work of the commission is comprehensive in its scope. The phrase, "care and education," is interpreted to include all the needs of youth between the ages of twelve and twenty-five. It is instructed to take account of the needs of all young people, whether they are reached by existing social agencies or not.

A Four-Fold Undertaking

Such a program is designed to include at least a four-fold undertaking: (1) an analysis of the characteristics of youth; (2) continuous study of commonly accepted goals in the care and education of youth; (3) investigation of agencies concerned with their care and education, and (4) promotion of desirable plans.

The commission in its work thus far has attempted to isolate problems in approximately seven major areas and is attempting to set up projects as rapidly as possible in each. In these areas the commission expects to review critically the research that has been done in these fields relating to problems of youth, to isolate the problems and issues in these fields and to make further investigations.

The specific studies that the commission is instructed to initiate immediately, in the order of preference, are as follows:

1. A comprehensive investigation of the characteristics of all the young people between the ages of twelve and twenty-five included in a number of representative communities—the extent of their schooling and their specific school accomplishments, their economic status, their vocational employments and their recreational, civic and social activities; an analysis of differences in these respects between those who have dropped out of school at various age-levels and those who have continued in school, and recommendations looking toward an improved program of care and education, particularly for out-of-school youth.

2. An analysis of the various plans for vocational education in common use, with particular attention to part-time vocational education in cooperation with industry and an intensive survey of full and part-time vocational opportunities open to young people.

The study should result in tentative plans for the improvement of vocational education and guidance and should include experimental demonstrations of such plans.

Vocational Education in CCC

3. A survey of the educational program and possibility of vocational education in the CCC, including an analysis of inherent problems and present failures and successes and their implications for American education; recommendations to strengthen the program, and experimental demonstrations of the recommended program in selected camps.

A part of this project will be a systematic and comparative study of practices of foreign nations in work camps, including a study of procedures in the vocational placement and adjustment of these youth.

4. Intensive and systematic investigation of secondary and general education in rural areas; the problems occasioned by limited enrollments in secondary schools; an inquiry relating to size of secondary schools, including an appraisal of means of penetrating to the individual pupil, whatever the size of the school, and experimental evaluation of newly developed methods of improving the instructional programs of small schools through the use of such devices as correspondence instruction, the employment of circuit teachers in special fields, and supervisory organization operative over groups of schools.

Even a partial solution of existing problems in this area would represent a large contribution, in that it would vitally affect thousands of youth widely scattered over the United States.

To Study Junior Colleges

5. Analytical study of the results of various types of reorganization at the junior college level; investigation of the possibilities of more effective articulation through such reorganization of secondary school and college work; experimental demonstration of both general and terminal curriculums at this level.

Present social conditions have created an enormously increased demand for types of education beyond that afforded by the usual secondary school which conventional institutions of higher education are not prepared to supply. Experimentation with the junior college has already gone far enough to suggest tentative answers to numerous problems in this area.

More exact and systematic evaluation of present experiments and extensions of these experiments are urgently needed.

We Must Choose

By ARTHUR G. CRANE

A NEW unrivaled instrument for mass communication is here. What social uses shall be made of this device? At present practically all available radio resources are devoted primarily to selling goods, social values being subordinate and incidental. Advertisers and broadcasters are sponsoring many programs of educational and civic value. Such gifts are commendable, but should programs for public welfare be dependent solely upon the private benevolence of advertisers or broadcasters? Should not an adequate part of this new instrument for public service be made available also for the people's use, as a right and not as a gift or favor?

Monopoly of the Air Dangerous

This is a democracy in which voters' judgments determine a nation's destiny. True information concerning public affairs is vital if a great people is to succeed in governing itself. The people's business should have the first call upon the air. Next to crass ignorance, indifference to public issues is the chief menace to popular government. Why should not the people listen on 25,000,000 receiving sets to announcements of public business, to discussions of vital issues, to the utterances of officers?

Freedom of speech on the air can never be as universal as in the press because of limited natural channels. However, privileges can be distributed fairly. To grant a monopoly of the air to two or three private companies is as dangerous to American institutions as would be a newspaper monopoly. What would become of freedom of the press if only two chains of newspapers were permitted?

Public school leaders, to whom is entrusted the instruction of 30,000,000 citizens, cannot neglect this new potent instrument for supplementing, accelerating and vitalizing instruction. It has demonstrated its worth. Europe is far ahead of America in admitting the world to the schools through radio. History, literature, science, music and world affairs reach the big city and rural schools alike.

Can the world enter the schools wholly dependent upon the benevolence of advertisers? Certainly education in the public schools cannot be made dependent upon private gratuity. Nor can private business be allowed to exploit the public schools by buying its way in with attractive programs.

How can public broadcasting service be provided? First, the educational broadcasters still remaining can be protected in their privileges. Other local noncommercial stations can be encouraged to start, modeled after those state stations now in existence. Broadcasting time will be given by commercial stations. School superintendents and administrators must give attention to radio, study its technique, provide for it in school

Shall the radio waves be monopolized by private broadcasters, and public benefits be made subordinate and incidental to selling goods? President Crane puts the question.

budgets, check its results and exchange experiences — in short, follow the same course as has resulted in the introduction into the schools of music, physical education, manual arts and all the newer courses that have enriched school instruction.

The National Committee on Education by Radio is now composed of representatives of the following important national groups of organized education: the National Education Association, the National Association of State Universities, the National Catholic Educational Association, the National Association of Educational Broadcasters, the National University Extension Association, the Jesuit Educational Association, the National Council of State Superintendents, the Association of Land-Grant Colleges and Universities and the American Council on Education.

The Public Can Buy Time

The plan proposed by this committee, representing America's schools, calls for educational, cultural and civic programs, supplementing but not supplanting the present private programs. In fact we now have such a combination of advertising and social broadcasting, but the public welfare programs are so small as to be entirely overshadowed by the advertising programs. This plan avoids government monopoly with its possible partisan programs of indoctrination as it also avoids the disadvantages of the present private monopoly. Public programs can be presented with no more interference with the present programs than the introduction of another customer. The public can purchase time on existing facilities for programs of public value as well as can purveyors of cigarettes or laxatives.

Must culture, education and public business be dependent upon private gratuity, or shall a share of this priceless resource be devoted to public use under public control and support? America must choose.

POIGNANT proof that school executives and school board members should take pains to acquire an elementary knowledge of the legal rights and liabilities of the public school district is afforded by frequent controversies involving the insurance of school property and the insurance of the district against liability in negligence cases.

Extensive studies by Dr. Frederick Weltzin of the University of North Dakota and other writers have shown that in forty-four states of the Union public school districts possess complete immunity from liability for the negligence of their officers or employees. The exceptions to this general rule are in California and the two other Pacific Coast states, where recent statutes have expressly made school districts liable for negligence under specified circumstances, and in the State of New York, where a line of judicial precedents imposes liability only when certain elements are present in the case.

Liability Insurance a Waste

Hence for the vast majority of all American school districts, liability insurance is in fact insurance against a contingency that cannot happen. If no liability can attach to the district, the liability insurance contract assumes a "heads, I win; tails, you lose" character, and premiums paid under it represent sheerest waste.

That substantial sums have been thus wasted is shown by a recent West Virginia decision, which also serves to emphasize the fact that expenditure of public school funds for such a purpose is beyond the legal powers of a school board, unless expressly authorized by statute.

One of the new county boards of education in West Virginia, upon taking control of the affairs of the county district in 1933, discovered that one of the local boards (which had been abolished by the County Unit Act) had paid out in excess of \$700 as premiums on a "public liability and

Insurance Controversies

By M. M. CHAMBERS

A great deal of school insurance litigation is undoubtedly due to over-aggressiveness and questionable business ethics on the part of competing private insurance companies.

property damage policy of insurance" covering the operation of its six school busses during the current year. After the expiration of the policy the county board instituted a suit to recover the premiums paid and won its case.¹

Fortunately it was able to point to a West Virginia statute which provides that funds improperly expended by any local fiscal body may be recaptured. This modifies the common law rule that there can be no recovery even by a public corporation of monies spent under a contract beyond its powers after the contract has been fully executed.

Premiums Paid Are Recovered

Tersely speaking of the uselessness of liability insurance where no liability exists, the court said: "The supposed justification for the charge made and paid—the *quid pro quo*—was nonexistent." Apart from the absence of actual legal liability, the insurance company argued that the policy of insurance was justified for several purposes: (1) to relieve the

¹Board of Education of County of Raleigh v. Commercial Casualty Insurance Co., (W. Va.) 182 S. E. 87 (1935).

school district of the expense of defending damage suits that might be brought, even though groundless; (2) to obtain investigation of accidents at the expense of the insurance company; (3) to enable injured individuals to enforce the driver's personal liability for negligence, and (4) to provide reimbursement to the district for any surgical relief imperative at the time of the accident. These matters, said the court, would not have justified an annual premium of \$700, even if they were regarded as within the board's power to insure.

Moral Responsibility Only

When someone receives serious physical injury through the negligence of a school bus driver, there is certainly a strong moral obligation upon all parties concerned to provide such medical attention as may be immediately necessary. Although the school district is not legally responsible, many persons think it should assume this responsibility, since the bus driver is usually unable to pay any judgment that may be levied against him, and the cost of the medical service is likely to be a heavy, and in any case an unjust burden upon the injured person or his parent.

Accordingly the West Virginia legislature, no doubt to some extent stimulated by the pendency of the suit just described, enacted in 1935 a law authorizing the county school boards to provide at public expense insurance against the negligence of drivers of school busses.²

This law imposes no liability on the school district, but in effect merely

²Session Laws of West Virginia, 1935, Chapter 60.

permits it to pay for insurance for the benefit of injured persons who may have occasion to proceed against a bus driver for negligence. Admittedly the new statute springs partly from a humanitarian motive, but to what extent its origin may be traced to the insurance lobby would be difficult to say.

In all probability school districts everywhere should be allowed to provide this type of insurance, but clearly the most economical way to do so would be by means of a state system of insurance similar to the familiar workmen's compensation laws.

Mutual Property Insurance

The power of a school board to provide school buildings and equipment carries with it the power to insure this property against loss by fire or other natural causes, unless this is prohibited by statute. As a matter of fact, extensive studies by Dr. T. C. Holy of the Ohio State University and others have demonstrated that in any large area over any considerable number of years, actual losses of school property are far too small to justify the premiums ordinarily paid or, indeed, to justify any insurance at all in large districts having a widely scattered school plant.

For example, the school district of the city of Columbus, Ohio, has long carried no insurance on school buildings, and over a thirty-five-year period actual losses from fire have aggregated less than half of what would now be the cost of 80 per cent fire insurance coverage for one year. In the same state, the Cleveland and Cincinnati schools carry no insurance other than "self-insurance" by means of a reserve fund locally set up and maintained to meet fire losses. This practice has proved highly satisfactory.

In the absence of a state school property insurance system, it is advisable for small districts having only one or a few buildings to carry some kind of fire insurance. The choice between "old-line" companies and "mutual" companies immediately presents itself.

Insurance can be obtained more economically from the latter type, but a legal obstacle exists if the contract subjects the insured to unlimited assessments to meet possible losses. However, in many states the mutual companies now offer a contract providing for a strictly limited assessment, and some states have expressly authorized school districts to insure in mutual companies. Both of these developments are illustrated by a recent case that came up in a California district.

The Ripon Union High School District in San Joaquin County, California, carries a \$21,000 policy in the local farmers' mutual fire insurance company, which is organized under a statute permitting any twenty-five persons, under specified conditions, to form a company.

A taxpayer sued to restrain the union high school district from paying its premiums. His principal contention was that the statute expressly authorizing school trustees to insure in mutual companies violated the constitutional provision against any governmental unit becoming a stockholder in or lending its credit to any private corporation.

Limited Assessments

The court refuted this argument, pointing out that mutual companies issue no stock, and that their members are not analogous to stockholders in a stock corporation. There would be an unconstitutional lending of the credit of the school district if it were subject to unlimited assessment, but in this case the assessments were expressly limited to five times the amount of the ordinary premium. In such a case there is really a fixed maximum contingent liability, only one-fifth of which need ordinarily be paid. Hence, the lending of credit, if there is any involved, is by the company to the insured school district, and not vice versa, said the court in this case.³

Kentucky and Pennsylvania decisions were cited in support of the

conclusion that insurance of school property in mutual companies under policies providing for limited assessments violates no constitutional provisions.⁴

Several years ago there was added an amendment to the Ohio constitution to make sure of removing any obstacle to mutual insurance by school districts.

State Insurance Successful

As intimated above, the most economical and satisfactory method of insurance for school districts, whether liability insurance or fire insurance, would be a statewide system operated by the state itself. State fire insurance systems for public property have been successful in South Carolina since 1900, in Wisconsin since 1903 and in North Dakota since 1919. State insurance plans of varying types are also in operation in Alabama, Florida and Michigan.

In Ohio the Sherrill Committee, a group of business men who recently completed a survey of the state and local governments at the invitation of Governor Davey, recommended unequivocally that fire insurance on public school buildings, as well as personal property and public liability insurance on school busses, be discontinued, and that the state set up a reserve fund from which all losses would be paid.

This reserve fund could be easily accomplished by merely making small deductions from the state school monies that are annually distributed to the counties.

After studying the amount of insurance premiums paid and the aggregate losses for a four-year period, the committee estimated that the annual saving resulting from a state insurance system would be about \$410,000 on school building insurance and about \$288,000 on school bus insurance.

"It is obvious," concluded the report, "that the state should insure its own schools."

³Miller v. Johnson, County Auditor, (Cal.), 48 Pac. (2d) 956 (1935).

⁴Dalzell v. Bourbon County Board of Education, 193 Ky. 171, 235 S. W. 360 (1921); Downing v. Erie School District, 297 Pa. 474, 147 Atl. 239 (1929).

Are Teachers Educated?

What the National Survey Showed

By E. S. EVENDEN

FREQUENT requests for a national study of the education of teachers were made during 1929 and 1930 by presidents of normal schools and teachers' colleges, deans of schools of education, and state superintendents and commissioners of education. These three groups vitally concerned with the education and certification of teachers were becoming sharply aware of the need for more extensive data on teacher education because of the growing oversupply of certificated teachers and the inability of the institutions to place the graduates of their teacher education curriculums.

Why Survey Was Needed

The teacher shortage that existed at the close of the World War, combined with the rapid expansion of school services in the years immediately following, made it possible to absorb the greatly increased number of persons completing curriculums for teachers during the period from 1920 to 1926. As a result, little attention was given to the wide variation in standards for the education of teachers which existed among the states and even within states. When, however, in 1927 and 1928 the increasing supply overtook the diminishing demand, institutions and states were confronted with the necessity of changing their standards and realized that they needed more accurate and comparable data on conditions in other states and other sections of the country.

The purpose of the National Survey of the Education of Teachers was to bring some of the more important problems more sharply to the attention of authorities for setting the standards for the education of teach-

ers. The survey was organized, the factual material gathered and interpreted, and the manuscripts written during the years 1931 to 1933 and the six volumes in which the final report appears were printed and distributed during 1934 and the first half of 1935.

Many of the data on the preparation and experience of teachers were gathered for the school years 1930-1931 and 1931-1932. Although most of the facts in the published report deal with conditions three and four years ago they are still valuable in an analysis of present situations. Even though the "depression years" represented a period in which the preparation of teachers could have been raised there is considerable doubt if conditions concerning the educational preparation of teachers in 1935 are significantly different from those in 1931 and 1932.

Situation Not Yet Corrected

Continued unemployment among certificated teachers, yearly additions to the surplus of recently prepared teachers, reductions in school salaries and other expenditures, elimination of special services and the greatly increased competition for positions which has often resulted in the employment of local applicants regardless of the adequacy of their preparation have all tended to retard the increase in standards that could so easily have been made during those years, had school boards held their salary schedules and obtained the best prepared teachers available for those salaries. It is ex-

tremely unlikely, therefore, that undesirable conditions which existed in 1931 and 1932 have been corrected by 1936 or that problems confronting institutions in which teachers were prepared in 1932 have been satisfactorily solved. For these reasons the data and especially their interpretations may be taken as presented, assuming, of course, that in any state in which more recent studies indicate that conditions have changed corrections will be made.

Some illustrations of the findings are presented merely as samples of the kind of information that can be obtained for talks, reports or as bases for conference discussions:

1 Women outnumbered men 2 to 1 in the secondary schools and nearly 20 to 1 in the elementary schools. Most of the men in elementary education were in the rural and small village schools. In European countries the ratios were reversed for secondary schools and even in the primary and elementary schools 40 per cent of the teachers were men. In 1931, 1 in every 6 elementary teachers, 1 in every 10 junior high school teachers, and 1 in every 14 senior high school teachers were married women.

2 More than a fourth (26.2 per cent) of the elementary teachers in the United States in 1931 had less educational preparation for their work than is represented by the completion of two years of work beyond high school. Nearly a half (46.2 per cent) reported only two years of

work beyond high school, while only an eighth (12.1 per cent) reported four years or more of college work. Thirty-nine and six tenths per cent of the junior high school teachers and 12.9 per cent of the senior high school teachers reported less than four years of work beyond high school, while only 16.7 per cent and 29 per cent respectively reported one or more years of graduate work.

Only one in each 250 senior high school teachers in the United States has an earned doctor's degree. When all teachers in the public schools of the United States are considered, elementary and secondary, two-thirds of them reported less educational preparation than four years of work on the college level.

3 The survey presents numerous indications of the educational exploitation of the schools in the rural areas and in the smaller villages. Teachers in those schools were younger, had less experience, had less educational preparation, received less salary, taught shorter terms and moved from school to school more frequently than did the teachers in the cities.

4 Junior colleges, liberal arts colleges and universities in 1931 supplied nearly half of the "new"¹ teachers employed that year from institutions of higher education—one-third of the elementary teachers, seven-tenths of the junior high school teachers and four-fifths of the senior high school teachers. The normal schools and teachers' colleges supplied slightly more than one-half of the public school teachers obtained from institutions of higher education that year. Altogether there are more than 1,200 institutions directly or indirectly engaged in the education of teachers for the United States.

5 Nearly half of the turnover was caused by teachers moving from one school to another in the same state, principally for the purpose of

increasing their salaries or improving their working or living conditions. The moves were usually from a rural school or village to a larger population center. The net effect of such moving is educational transiency and its resulting ineffectiveness.

When the data for the survey were collected on this item, approximately one in every five public school teachers in the United States was "new" in his position that year. There was, of course, wide variation among states in this matter. For example, in Rhode Island about one in sixteen elementary teachers was new in his position that year, while in North Dakota nearly half of the elementary teachers were new. In 1931, two out of every five rural teachers in the United States were new, while in cities of 100,000 population and over only one in every twenty was new.

6 Survey data revealed the fact that it was possible in almost every state for a teacher to prepare for work in one division of the school system and accept a position in another, as, for example, to prepare to teach English and French in a senior high school and to accept a position as a rural school teacher or as a kindergarten-primary teacher. Another phase of the same problem was shown by the great variety of subject combinations taught by teachers in the secondary schools. The data gathered on these and related topics indicated clearly the need for radical revisions of the certification laws in nearly all of the states.

7 Information was collected on the causes for the vacancies which resulted in a demand for new teachers and on the sources from which the new teachers were drawn. Such variations among the states were found that the problem of adjusting the supply of teachers to the demand is clearly indicated as one which each state must meet individually. Based on the data obtained, procedures for adjusting the supply and demand for a state were proposed and a formula for finding demand was developed.

8 A comparison of the student bodies of a selected group of teachers' colleges and a selected group of liberal arts colleges in the same area revealed interesting differences between the two groups with most of the comparisons slightly favorable to the liberal arts college group, although it was considered significant that the differences were much less than were shown in earlier studies in which similar data were collected. The type of student now selecting teaching as a career is distinctly superior to that of even a decade ago.

9 Comparisons were also made among the faculties of the eight or nine groups of institutions in which teachers are prepared. Interesting differences were discovered among the types of institutions but the differences were smaller and much less significant than the differences within any one group. Within the state university group the difference between the best prepared faculty and the one with the least preparation was much greater than the difference between the average preparation of state university faculties and that of teachers' college or of junior college faculties. Nearly half of the staff members of institutions in which teachers are being prepared had not had any teaching experience in either the elementary or secondary schools and an insignificant number had any direct responsibility with laboratory schools.

10 One of the fields in the education of teachers in which many of the controversial issues were found was that of the curriculum. For that reason an extensive study was made of the curricular patterns for teachers as followed in the different types of institutions. The analysis was divided so that the curriculums of the normal schools and teachers' colleges were studied as one group and those of the junior colleges, colleges and universities as the other. Most of the controversies arose over the comparison of the practices of the institutions which had been established especially for the education of teachers and

¹A new teacher was defined for purposes of the survey as a teacher who was not teaching in a given position the preceding year.

those in which the education of teachers was only one of several goals of the institution. The reports of the curriculum analyses are given in Volume III and contain a large number of interesting and significant findings.

11 The education of Negro teachers in those states in which separate school systems are maintained for Negroes involves a large problem in the up-grading of teachers already in service as well as provision for the education of larger numbers of teachers with approved educational and professional preparation. Nearly a fourth of the Negro elementary teachers who supplied data to the survey had not had more than four years of high school work. Because of the inadequacy of the number of replies there are reasons to believe that even a larger proportion of the Negro elementary teachers were in the group with high school education or less. Many others had had only short courses, *e.g.* a six-week summer school course beyond the completion of the high school. The development of a program for the progressive up-grading of these teachers will require additional data and much careful study.

12 The history of teacher education in the United States shows the development of certain trends that are useful in explaining past procedures and in planning for the future. Among these trends was the move toward the concentration of certification privileges in state departments with an increasing amount of work in education required for certification. Another has been the raising of the level of preservice educational preparation from the completion of the common schools to a point where practically all teacher-training courses require the completion of high school for entrance and extend from two to four or more years before entrance to teaching. A third trend has been the rapid development of departments and schools of education in connection with the work of colleges and universities.

13 Many of the more troublesome controversial issues in connection with the preparation of teachers will not be settled until there is a satisfactory way to measure the quality of a teacher's work. If this could be done it might then be possible to say with more assurance that one type of curriculum is better than another or that one sequence of courses would produce stronger teachers than another sequence.

While it was impossible to find or develop a satisfactory means of measuring teaching merit in connection with the survey, much work was done in assembling, analyzing and classifying the large number of studies that have dealt with phases of this problem.

14 Data were collected concerning the organization and equipment of the libraries in a selected group of teachers' colleges compared with those in a selected group of liberal arts colleges and universities. This study showed a marked superiority of the libraries of the liberal arts colleges on such matters as number of volumes and periodicals, number of recent acquisitions in fields of education and related fields, amount of money spent per student on new books, number and preparation of library staff members and extent to which the libraries were used.

15 In order to compare the educational and professional preparation of teachers in American public schools with those in certain leading European countries special studies were made of the standards for the preparation of teachers in England, France, Germany and Sweden. In all of these countries, with the possible exception of Sweden, the elementary teachers were more nearly adequately prepared than was true for the United States as a whole.

When the comparison was made for secondary teachers the difference between our standards and those of other countries was much more marked. Many of the secondary teachers in England and most of the

secondary teachers in the other three countries had an educational preparation quite comparable to the possession of a doctor's degree in this country (held by only 0.4 per cent of the high school teachers in the United States).

In preparing the sixth and summary volume for the survey, the attempt was made to concentrate upon the following three problems: (1) to raise the level of education of American teachers in terms of the quantity or amount of such preparation; (2) to make their preparation more distinctly professional, being concerned primarily with quality of appropriateness, and (3) to bring about a more desirable adjustment between demand and supply among teachers, thus ensuring greater professional security. Each of these problems was discussed in a chapter of the summary volume and the findings from the various studies reported in the preceding volumes brought to bear upon the discussion of the problem and proposed ways of solving it.

It is hoped that groups or individuals interested in the education of teachers, and few in education are not, will find in the final report of this survey: (1) the statements, direct or implied, of many challenging problems and controversial issues in this field, which must be submitted to further study in connection with the development of programs for the education of teachers in any state; (2) more or less data on current practices, arranged by states or for the country as a whole, that will indicate the extent or seriousness of the problem to be studied; (3) analyses of the problems and issues made by the various members of the survey staff, which should save valuable orientation time of the individual or group starting further study in the same fields, and (4) proposed solutions to some of the problems that can be adapted and given trial.

The range of topics studied and the amount and comparability of the data collected are greater than for any other survey in the field of teacher education.

Happy to Say

By WILLIAM McANDREW

THE conversions of Jonah, of Paul, of Constantine, of Luther, of Wesley to religion, of Lincoln to freedom, of Pasteur to human welfare, were each a climax occurring at a definite moment. Masters of human lore insist that everyone by centering his mind on the satisfactions of a great service—for instance, education—can experience the ecstasy of the noble mind discovering its work. From such a moment you are a changed soul. Petty annoyances cease to pester you. Great troubles lose their sting.

WHEN I consider the gladdening of life and the smoothing of rough places done by teachers for the children of my country, I wonder how any *Saturday Evening Post* could lend its pages to expression of contempt for such patriots.

MUCH money has been spent to acquire gems. I never yet went into a classroom without a thrill because of the marvelous jewels which are some children's eyes.

IN THE protest of a school superintendent recently failing of reelection occurs the claim that he had prepared and delivered 3,159 speeches during his eleven years in the town. Good! A woman teacher in our county declares that the less she talks and the oftener she induces pupils to do it, the more valuable she is. She estimates that she is responsible for 8,793 speeches in a school year. They are short and hit the mark. She is still holding her position after twenty-two years of it.

SHORT Anglo-Saxon words have the most pith and warmth. Hildor Gislason, in his book, "The Art of Effective Speaking," gives a table showing the percentage of shorter and longer words used by various eminent speakers:

	Words of One and Two Syllables, Per Cent	Words of More Than Two Syllables, Per Cent		Words of One and Two Syllables, Per Cent	Words of More Than Two Syllables, Per Cent
Wendell Phillips	91	9	Abraham Lincoln	89	11
Henry Ward Beecher	90	10	William Jennings Bryan	89	11
John B. Gough	90	10	Robert Ingersoll	92	8

This list is a challenge; henceforth I lead a better life.

EVERY fortnight there comes out of Antioch College, Yellow Springs, Ohio, a nifty little eight-page preachment beautifully printed—"Antioch Notes." People thinking about the large questions now perplexing mankind—money, work, hard times, low spirits, government, dictatorship and so on—condense their thought into short illuminating paragraphs that are set in handsome type. These are like miniature editorials. This unique adventure says nothing about price, but I imagine that if you send a dollar to cover postage, you might get these semimonthly messages of information and inspiring comfort quite a while.

CHILDREN as well as supervisors are least satisfied with those teachers who are most satisfied with themselves.

THE SCHOOL PLANT

W. K. KELLOGG AUDITORIUM





By BURTON A. ADAMS

in every sense supporting walls and they carried steel I beams and the reinforced concrete floors without the benefit of a steel skeleton. In the mechanical wing of the building most of the floor beams and supporting posts were of reinforced concrete poured on the job and tied into the brick walls with the reinforcements. This building was equipped completely in September, 1906, and girls were added to the student body.

In 1924 on the street parallel to Elliot Street there was erected a three-story and basement building of modern brick, steel and reinforced concrete construction. This building was separated from the older building by some 60 feet of space and connected by two temporary wooden bridges. The two buildings together served to accommodate the growth of the school, though with increasing difficulty, until the end of the school year in 1933. During this period of growth most of the special rooms for

boys' and girls' technical work were moved from the older building to the newer building and the rooms of the older mechanical wing were devoted to other and temporary purposes.

In the fall of 1934, with an appropriation of \$350,000 under PWA regulations, the demolition of the old mechanical wing was started and

in the space between the two buildings was erected a modern three-story and basement structure of first-class construction which was joined to the two older buildings in such a way as to make one complete, homogeneous building with an estimated capacity of 2,200 pupils. At present there are slightly more than 1,800



Cafeteria and kitchen. The main serving table is stainless steel with lacquered panels and chromium trim. It accommodates four lines of pupils simultaneously. The kitchen has adequate space for supplies.

pupils in attendance, divided approximately into 1,300 boys and 500 girls. This new and central portion of the building was occupied in its entirety in September, 1935; and, while still lacking in some items of equipment and decoration, it is practically a finished structure.

Corrects Defects of Older Building

The appropriation for its equipment was an even \$100,000, which is in addition to the \$350,000 mentioned as the cost of the building. In planning this central portion of the building it was necessary to make several compromises between desires and needs in order to meet, first, the limitations of the two existing structures and, second, the financial limit of cost. An attempt was also made to correct certain defects in the planning of the two older structures that had demonstrated themselves after years of use.

The first result of this planning was to give to the new and remodeled building ample corridor space to provide for flow of traffic to all parts of the building on each of the three floors above the basement. This problem has been successfully solved.

It is interesting to note exactly what this new portion of the building comprises. First, the basement, which comes only four feet below the ground

level, contains a cafeteria with its accompanying kitchen large enough to accommodate 1,000 pupils at a sitting. The tables are circular, some 44 inches in diameter, supported by a central column rigidly fastened to the terrazzo floor. With movable stools these tables accommodate six pupils easily and a maximum of nine without serious crowding. An alcove opening out of this room with similar tables but with chairs instead of stools, serves as the faculty lunchroom and will seat forty people without crowding. It is planned to have a permanent serving table for this room so as to avoid the necessity of sending teachers through the regular lines of pupils at the main serving counter. At present the arrangement is a temporary makeshift table which answers the purpose.

Counter Service in Cafeteria

The main serving table for the pupils is stainless steel with lacquered panels and chromium trim and accommodates four lines of pupils simultaneously. Two pupil assistants are employed for each line, one as checker and the other as cashier. The serving back of the counter is done by permanent adult employees.

This serving counter is completely equipped with warming ovens and steam tables but is minus either tea

or coffee urns as it is contrary to the policy of the school authorities to serve these beverages to pupils. Directly back of the counter are food and dish cupboards and electric refrigerators, which open both toward the counter and into the kitchen, permitting them to be filled from the kitchen side and to be emptied from the counter side as needed.

Soiled dishes and trays are picked up by pupil employees at the close of each luncheon period and are carried on trucks to the soiled dish window, which opens directly on to the tables of two dish washers.

The kitchen itself is completely equipped with electric apparatus—two ranges, two bake ovens, steam kettles, pastry ovens, toasters, food mixers and an electric refrigerator in addition to the two serving the counter. Storage space for supplies for immediate use opens directly out of the kitchen, and the large storeroom for permanent supplies opens out of one corner of the cafeteria. In both instances, these rooms are easily accessible to merchants' delivery by truck.

Auditorium Has Street Entrance

The kitchen is well lighted, but not completely, by outside windows, and approximately one-half of the cafeteria is lighted by skylight, while the balance of the room comes under the floor of the school auditorium.

This auditorium on the first floor is easily accessible from the street by means of its rear doors and is accessible from classrooms by doors at the side as well. The floor is dished, and every seat, with two exceptions, has full view of the stage. Across the rear of the auditorium is a balcony accessible from the second floor corridor and seating 176. The main floor seats 1,020.

The stage is provided with floodlights in concealed wells, and has a complete theatrical switchboard and provision for ample scenic equipment that can be hoisted above the proscenium arch. A dressing room, opening from the rear of the stage on either side, will provide sufficient ac-



The main floor of the auditorium seats 1,020 and the balcony accommodates another 176 pupils. Floodlights in concealed wells, a complete theatrical switchboard and ample scenic equipment are provided.



Thirteen classrooms are provided, one seating eighty-four and the rest forty-two each.

commodation for most school functions although it is somewhat inadequate for professional or outside amateur performances.

For speaking purposes the acoustics of the hall are ideal and they are also very satisfactory for music. On either side of the hall are corridors and beyond these corridors classrooms, one of which is a room for advanced machine shop practice, at present only partly equipped but what equipment there is is new and modern with individual motor drive for each machine.

Gymnasium May Be Divided

Just at the rear of the stage of the auditorium and on the opposite side of the corridor is the entrance to the boys' gymnasium. This room has outdoor light and air and is provided with a folding partition across its center. This partition permits the room's use for two sections of some sixty boys each at the same time. When needed for larger groups—for a basketball game or a dance—the partition can be readily and easily folded back to the wall, and the entire room is at once available. Movable bleachers, permanently af-

fixed to the walls, can be rolled out when necessary and will accommodate approximately 1,000 spectators.

Directly under the gymnasium floor are the locker and shower rooms. These also are arranged in pairs so that classes may operate independently of one another. The locker units, which are controlled by combination padlocks, consist of eight short lockers for gymnasium suits to one long locker for street clothes. In addition to these two rooms there is one locker room with some twenty-odd large lockers to accommodate visiting teams and to give them accommodation away from the regular school accommodations.

There are two other special rooms in this building. One is a music room, which has been especially treated with acoustic plaster and which is used for chorus work and for individual musical instruction. The other is a physics laboratory intended for advanced experimental work. There are thirteen classrooms, one seating eighty-four and the rest forty-two each. Supplementary space is also available for such purposes as the boys' and girls' emergency rooms

which are presided over by the school nurse, a photographic dark room, several offices for department heads, a weighing room for the science department, and rest rooms for both men and women teachers.

Lockers Work Smoothly

A minor feature of construction but one that aids greatly in smooth operation at the beginning and close of school is the installation of coat lockers for pupils in the corridor walls. Each locker provides for one pupil and consists of a tall and narrow space for coats plus a separate cupboard above for books. This last opens only when the coat locker is opened but can be closed independently and locks on closing.

The building is heated by low-pressure steam and has a modern system for fresh air supply. One striking characteristic of the entire structure is the abundance of natural light in corridors and the inner rooms such as the school auditorium and cafeteria. Supplemented by modern lighting for unusually dark days, this makes the building an exceedingly cheerful and pleasant place under almost all conditions.

BETTER PLANT PRACTICES • • •

Custodial Work Is Man-Sized Job

Instead of a skeleton staff of men, under whom the daily cleaning is performed by a crew of women, A. C. Lamb, maintenance engineer, Hamtramck Public Schools, Hamtramck, Mich., believes it a better policy to employ capable men, who are selected by an intelligence test and a strict physical test.

"These men are put on a permanent salary," he explains, "with a two-week vacation during the year and are given a ten-day sick leave the same as teachers. We impress on them the fact that they are as important to the school system as the teachers themselves. We are operating schools primarily to train children to live successfully in a democracy. We believe that it is as necessary that they have clean, sanitary and pleasant classrooms as it is to have the educational tools with which to teach them. We believe that our custodial staff should be made up of a type of men who can get along with children and who are sympathetic to the children—men who will take pride in keeping the building spotless and sanitary.

"We schedule these men so that only two are in the building during the day while classes are in session. The others work at hours of the day when children are not in the building. We do not believe that women are adaptable to this type of work, as it is too heavy for most of them. Mopping with a 24-ounce mop or handling scrubbing machines is too heavy work for women, as is moving furniture, which is frequently necessary. Climbing ladders, washing windows and light fixtures and other duties requiring the use of ladders are not the proper types of work for women. We use women for washing dadoes, drinking fountains, wash bowls and interior glass which can be reached from the floor, dusting, and the light work which they can do easily and to which they are better adapted.

"During the vacation, particularly the summer vacation, our custodial staff works harder than when school is in session. During these periods the walls, ceilings and woodwork are washed, floors scrubbed and treated, light fixtures removed and washed, and the building generally housecleaned, from top to bottom. Undoubtedly, we could save money by employing a skeleton crew and en-

gaging women to do the major portion of the cleaning on an hourly basis. We would expect, however, to get a poor quality of work.

"Our maintenance staff is composed of a skeleton crew: electrician, plumber, cabinet-maker, musical instruments repair man and carpenter. These men act as foremen when we need to employ additional help. The skeleton crew is on a yearly salary and works twelve months of the year. During the summer, we hire additional carpenters, plumbers, electricians and cabinet-makers for the repair work which is to be done during the vacation period. During the ten months school is in session, our skeleton crew is able to take care of minor repairs and emergencies.

"Our custodial staff is small enough so that each man has full eight hours of work daily, scheduled on the unit basis. Each unit consists of 100 square feet of building area, 2,000 square feet for ground unit and 1,000 cubic feet for heating unit. Each man is assigned 170

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

units, which is a full day's work for any able-bodied man and takes his full eight hours. In one school in which we have a floor area of 131,515 square feet, cubic contents 2,579,429 cubic feet, sidewalk area 11,185 square feet and grounds 98,906 square feet, we have nine men and two women. The men work eight hours per day and the women, five hours. Men are on a salary of \$1,704 a year and women get \$648.

"In each building we have a chief custodian who is in charge of the entire custodial staff and is responsible in turn to the assistant principal. The chief

custodian has a lighter schedule than the other men and is charged with supervising and inspecting the work of the rest of the crew. We are getting excellent custodial service and at a very reasonable rate. We could not get work of an equal quality on a hourly rate where the employees would be used only during the ten months of the year when schools are in session. On this basis also, it would be necessary to hire other help during the vacation to get the housecleaning done."

No Excuse for Dirty Boiler Room

Another school custodian states emphatically that there is no good reason for the boiler room or furnace room in any school building being dirtier than the superintendent's office.

"Coal dust, ashes and soot are the three sources of dirt in any boiler or furnace room," says W. F. Currington, custodian, City Public Schools, Jackson, Ohio. Control of the coal dust is simple. Wet the coal before putting it in the bins and keep it wet while handling it from there to the fires.

"The control of ashes, however, is not so simple, although it can be done. First, a coal should be used which in combustion does not form clinkers. Second, the boilers or furnaces should be equipped with shaker type grates, and, third, the ash pit floors should extend to a depth of several inches below the level of the furnace room floor. With coal that makes no clinkers and grates of the shaker type the fires can always be cleaned by simply shaking or dumping the ashes into the ash pits. They can then be wet down thoroughly and taken out without spreading dust.

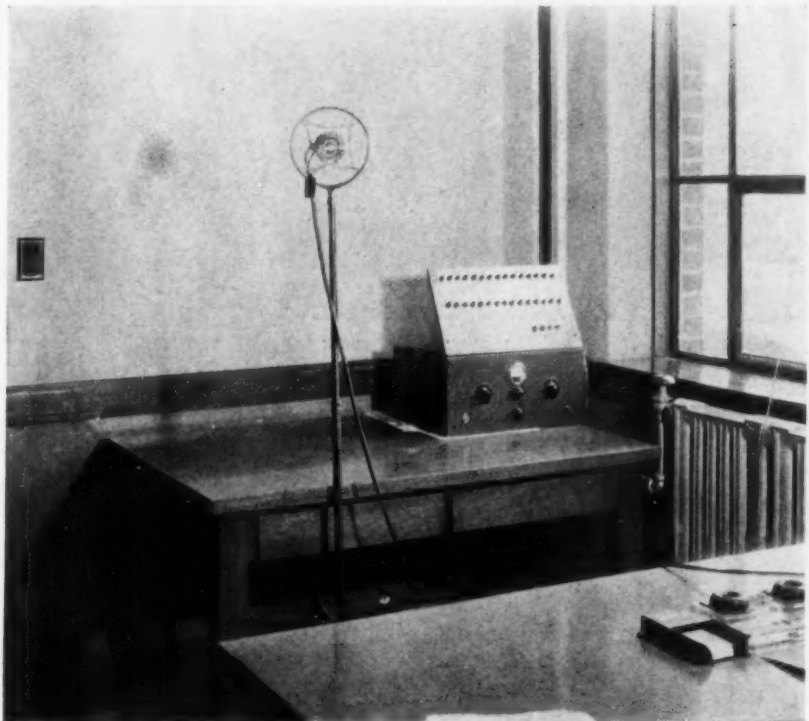
"In the construction of many ash pits the mistake is made of having their floor level the same as the furnace room floor. This makes it impossible to wet the ashes thoroughly because of the water running out through the draft doors. But with sunken pits, all the water from the hose will remain in the ashes. The wetting down should be done at least one hour before taking the ashes out, to allow the water to soak thoroughly into them. After a little practice the exact amount of water can be used to make all the ashes damp but not sufficiently wet to be too heavy to handle.

"There is only one way to control the soot evil, and that is to clean the tubes, flues and combustion chambers with a vacuum cleaner. Boiler rooms or furnace rooms handled in this manner will need only the regular periodical dusting to keep them as clean as other rooms."

School Makes Itself Heard

By W. F. CURRINGTON

This corner of the principal's office accommodates amplifier, control panel and microphone of the address system.



DURING construction of the Jackson High School building in 1930, the electrical wiring included installation of loud-speaker jacks in the classrooms, auditorium and gymnasium. During the five years that the building has been in use, several proposals for the installation of public address systems have been considered but they cost more than we could pay.

In the summer of 1935, the senior class presented the school with an amplifying system. After this gift had been received, H. L. Bates, superintendent of the Jackson schools, and T. K. Owens, principal of the high school, financed the purchase of loud-speakers and the installation of them throughout the building. Following is a list of the materials used with their cost:

Amplifier, speakers, microphone and stand	\$99.61
26—12-inch magnetic speakers	91.75
1—8-inch magnetic speaker	3.60
1—6-inch cabinet magnetic speaker	3.95
30 toggle switches	6.60
30 phone plugs	3.30
30 speaker cords	2.25
¼-inch ply-wood	4.35
2 doz. ¾-inch pipe clamps	.20
1 pint light oak stain	.60
5 pkgs. steel wool	.25
2 dry cells	.50

160 ft. cotton covered lamp cord	3.20
1 box insulated staples	.15
2½ yds. drapery	1.73
3 doz. picture molding hooks	.75
5 rolls picture wire	.50
Flat washers	.15
1 gross wood screws	.30
4 shelf brackets	.70
113 ft. rubber covered lamp cord	3.30
50 ft. cotton covered lamp cord	1.00
4 porcelain tubes	.04
1 doz. metal straps	.10
2 keyless light sockets	.30
1 roll radio solder	.25
2 control panel brackets	.30
50—15,000 ohm resistors	4.00
160 ft. microphone cable	7.85
2—3-prong microphone plugs	.88
2—3-prong microphone sockets	1.16
3 toggle switches	1.26
2 copper terminal strips	.20

Total \$245.08

At a total cost, therefore, of \$245.08 the Jackson High School has an efficient public address system reaching from the principal's office to every room in the building. It is interesting to note how this was accomplished.

The high school has twenty-eight classrooms. Twenty-four have loud-

speakers, one speaker serving the three manual arts rooms and one speaker serving the three home economic rooms. There is a speaker in the general office, one in the superintendent's office, one in the custodian's office, one in the gymnasium and the small cabinet speaker is used as a monitor in the principal's office.

Twenty-six of the magnetic speakers are twelve-inch and one in a small classroom is eight-inch. These speak-

One way to acquire a public address system at small cost is described by Mr. Currington, school custodian in Jackson, Ohio. He lists the materials used with their costs and explains the entire procedure as carried out.



On the wall above the blackboard is the loud-speaker mounting.

ers, as purchased, consisted only of the cone, magnet and coil. Ply-wood was used for baffle boards for these speakers. Twenty-six pieces of this wood were sawed exactly 16 inches square with an 11-inch round hole cut in the exact center. One piece was sawed exactly 12 inches square with a 7-inch hole cut in the exact center, for the eight-inch speaker.

Installing the Loud-Speakers

This wood, in preparing it for use, was sanded to provide a smooth surface. It was then given a coat of light oak stain to match it with the other woodwork in the rooms. Following this it was given three coats of high grade gymnasium floor finish, the first two coats being rubbed down with fine steel wool to provide a smooth finish and high gloss. One piece of the same wood, 10 by 15 inches, was used for the control panel, on which were mounted the switches, resistors and terminal strips. Two other pieces, 14 by 18 inches, were used in connection with the shelf brackets for mounting the dynamic speakers in the auditorium. The speaker in the gymnasium is suspended from the ceiling, practically enclosed in the structural work of the steel girders, making it safe from any damage by the physical education classes.

The 15,000 ohm resistors appearing on the list were used to maintain

a constant volume on the speakers. If it is desired to speak to only one or a few rooms, all the other speakers are cut out on the control panel. If it were not for the resistors in the circuits, frequent manipulation of the volume controls on the amplifier would be necessary. But with these resistors in the circuits, every time a speaker is cut out a resistor is cut in. Since the impedance of the resistor is the same as the speaker, the load on the line remains the same, thus assuring a steady volume without resetting the controls of the amplifier.

The speaker jacks in the classrooms are located in the center of the front wall about midway between the top of the blackboard and picture molding. The speakers are suspended by picture hooks and picture wire from the molding. This mounting of the speakers conceals the jacks, installed flush in the wall, the phone plugs, speaker cords and speaker cones. In fact, the only parts of the entire assembly visible are the baffle boards and drapery covering the face of the cone, the same as in any radio speaker.

Where Open Wiring Was Necessary

The 160 feet of microphone cable was used in order to avoid moving the amplifier from the office to the stage for programs or entertainments in the auditorium. Through the use of this cable and some unused wiring already in conduit, it is necessary only to

move the microphone and plug it in on the stage, with the three-prong sockets and plugs.

The high school was fortunate in the installation of its public address system in that the original wiring of the building included the installation of loud-speaker wiring to the classrooms. But in this recent installation there were three places not equipped with speaker jacks. Open wiring was run to these places in a neat, inconspicuous manner without any great difficulties being encountered, which shows that buildings not originally equipped with concealed wiring could install a public address system without much trouble or additional expense.

It will be noted that there is no item of labor listed in the expense of installing this public address system. That is because the building custodian, who is also an electrician, made the installation. This man is employed the year round and his salary would have been paid, even though he had not been occupied in this work.

A total of sixteen nine-hour days was required for the complete installation of the system. Even allowing an additional expense of standard electrician wages, the entire cost would still be sufficiently low to make it almost negligible compared to the numberless great advantages any public address system affords.

Shop Equipment in Summer

What precautions are taken in the school shop during the summer vacation, in order to protect expensive equipment? In the New York City schools all exposed parts of machinery and shafting are "slushed down" for protection from rust. "Slush" is removed at the end of the vacation period. Requirements are that all belts must be removed from pulleys and treated with leather preservatives to keep them in good condition. In schools where there are shop assistants this work is done by them; otherwise the shop instructor is held responsible for it.

Food Buying Based on Fact

By ETTA H. HANDY

THE trained food manager recognizes a three-fold responsibility in the purchasing of food supplies—to the financial office of the institution, to the public served, and for the maintenance of correct food standards in service. The total expenditures for food supplies must be within the budget established and should be proportioned carefully to the various types of foods.

Must Know Trade Practices

These three obligations have a single objective—to develop the best quality product at the lowest price consistent with the service desired. The successful manager is constantly alert to changes in the purchasing field, to the varying tastes of the public and to new ideas for improved service. The efficient purchasing of food supplies in quantity for institutional use is dependent upon familiarity with market or trade practices, a knowledge of the economic factors involved and the correct procedure to follow in placing orders as well as upon a definite plan for the final use of the foods.

A thorough knowledge of marketing and trade practices will include the terms used in the specification of various items; the method and unit of pack such as the case, the crate, the sack, or by bushel, weight or individual count; grading according to size or quality; the manufacturing and distribution costs; data on commodities supplied by specialized industries or available from local sources of supply; the number and location of reliable vendors, and correct purchasing methods.

Information on the economic aspects is related to the sources of pro-

duction, the channels of distribution, the laws of supply and demand, the factors influencing current market quotations, the progress of standardized methods and the development of new manufacturing processes in food supplies.

Closely allied to this is the technical information of laboratory testing or analysis, government or business statistics on production, manufacturing and distribution, market forecasts, and the state or government laws or regulations governing foods. Of value also are the reports from the research departments of many industries on the use of specialized foods with the possible uses of new food products or new methods of using established products.

Standardized Recipes Important

Since the size and number of portions to be served at a given price, the quality, the nutritive value and the satisfaction of the patrons are important, the merit of any product is necessarily judged in relation to these factors. Net yield is a term used to indicate the quantity of food derived

from any product after preparation for service on the table. In the case of some items of food this preparation may include cooking. Individual portions may be cost-priced according to the net yield derived.

Net yield is expressed in terms of standardized portions. The use of standardized recipes, therefore, and the maintenance of a correct set-up for the product served will make it possible to select the proper quantities of supplies. All items should be chosen in this way to give the desired number of servings.

Control of Quality

The control of quality is all-important. The word "best" is used rather loosely, since it is frequently applied to a higher percentage of market products than may be rated as best in the strictest interpretation of the word. A comparatively small percentage of fruits or vegetables in canned or fresh forms are in a strictly fancy grade, and only an approximate 1 per cent of all the U. S. branded beef is "best." It is nevertheless true that high grade materials in almost all food commodities give the highest net yield, the greatest satisfaction to

The term "best" to signify quality in foods is frequently used inadvisedly. "In stating the quality desired by the food manager," explains Etta H. Handy, director of dining halls, Eastman School of Music, University of Rochester, "it is essential that the grade of product most appropriate for the ultimate use be specified. The control of quality is all-important."

the manager and the consumer, and are the most economical over a period of time. Therefore, in stating the quality desired by the food manager, it is essential that the grade of a product most appropriate for the ultimate use be specified.

There would be neither economy nor fitness in using the "best" oranges for orange juice if the term "best" were to be interpreted as a specification for a fancy large orange adapted for table use. The specification must define a juice orange to give the greatest yield and the most satisfactory flavor. The locality producing the most satisfactory oranges will vary from year to year according to temperature or climatic conditions. The size of oranges grown in any given area will vary as to the best yield of juice from one season to another also.

The last decade has brought marked improvement in the packing, handling and grading of fresh fruits and vegetables in the markets and the varieties available throughout the

year have increased. The use of refrigerator cars and the scheduling of a more rapid bus and train service have facilitated deliveries and an excellent supply of many items is available in almost perfect condition.

Citrus fruits from Florida and California must compete with those of Texas and Arizona. Strawberries from the Southern states may be purchased through the winter and spring months. Green beans, peas, spinach, broccoli and mushrooms are available at reasonable prices through many months of the year. The successful cultivation of tomatoes, radishes, cucumbers, lettuce and endive in hot houses has become an important factor in marketing. The regulations of state and cooperative associations have improved the grading of some supplies, such as Oregon and Washington apples. California graded eggs, shell-treated, compete with Eastern products during the fall and early winter months as a result of improved marketing and transportation meth-

ods. It is obvious that distance is a comparatively small factor.

Other examples of changing market conditions will be found in the root vegetable group. Potatoes grown in Idaho have a deservedly high reputation for baking purposes owing to ideal soil and climatic conditions. Colorado produces an excellent red-skinned potato that does not discolor in boiling. This may also be true of some varieties produced in the East but seasonal climatic conditions sometimes cause a variation from year to year in the quality of any product. Whether the higher price which must be paid in Eastern markets for potatoes imported from a distance will be warranted depends on the service desired in the individual institution.

Sweet potatoes may be purchased for a longer season than formerly since the development of the dry-kiln method of storage has increased the keeping period. Root vegetables such as carrots, beets and turnips are produced in the Southern and Pacific coast regions for market in the winter months, and Canadian or Southern rutabagas are usually excellent. These will vary somewhat in character from the Eastern products subject to storage.

Again the development of new processes for freezing fruits and vegetables and some other items provides an interesting and valuable contribution to the variety offered by markets in many cities and towns. Frozen green peas are less expensive than fresh peas at some seasons. Blueberries, cherries, peaches, raspberries and strawberries make excellent desserts at a reasonable cost. Frozen fish and sea foods are satisfactory also in those regions not easily or quickly accessible to fresh supplies.

These changes in marketing methods and processes have made it possible to use fresh fruits and vegetables in greater variety and over a longer period of the year than formerly. The increase in variety affords an opportunity also for substituting one item for another if necessary to keep within the budget.

Food products are marketed in new

Lunch Counter "Best Sellers"

By MRS. RUTH UNDERWOOD

Each article of food for grammar school children sells for five cents. Pupils in the junior and senior high schools pay ten cents for a hot dish, comprising a substantially larger serving from the same menu.

Soups:

Corn chowder
Chicken and rice
Quahog

Hot Dishes:

Creamed dried beef with baked potato
Meat on toast (hamburg in gravy)
Beef stew
Creamed chicken (not canned)
Corned beef hash—freshly cooked
corned beef mixed with freshly
mashed, fluffy potatoes served
with a spoonful of coleslaw

Salads:

Fruit salad

Salads, Cont.

Roosevelt salad—chopped raw
cabbage, cooked carrots, peas,
beets, chopped green peppers,
celery and French dressing

Sandwiches:

Egg
Chicken
Crab or tuna and celery
Sliced ham

Desserts:

Gelatine
Ice cream
Fruit cobbler
Chocolate pudding
Butterscotch pudding



forms from time to time, and a rising price in one product may force the substitution of another. For example, the marketing of orange, lemon, grapefruit, pineapple and tomato juices has met a real need. The rising cost of meat supplies in recent months has increased the use of sea foods.

The selection of canned goods suitable for a specific purpose is rather less difficult than the purchase of fresh food supplies as the grading and packaging are more uniformly standardized. Nevertheless, the quality, the use desired, the net yield and the size portion must be carefully considered in relation to the cost of the individual item.

Canned fruits are graded fancy, choice and pie pack. Canned vegetables are graded as fancy, extra standard and standard. There is in addition a substandard can offered at times in some items and all such products must be so marked by U. S. government regulation.

There are also various types of pack in canned goods according to use, as in pineapple packed in slices, tidbits, crushed, "fingers," or in its most recent form, "tree-ripened" for dessert use. These items all require a definite selection on the basis of use. Pineapple may be in a No. 2 or No.

When It's Lunchtime in Florida

Satisfied faces tell the story. It has been a good lunch, served in attractive surroundings in one of the small schools of Jacksonville. Now the camera man is the center of interest. He has made it difficult to turn from so many appealing looks to study such details as the attractive chintz hangings, the flower vases on the tables, each filled with a bright colored blossom, and the swinging baskets and sidewall brackets filled with trailing ferns. The picture was snapped in one of the Jacksonville school cafeterias described by Mrs. Alice Rolfe Certain, the director, in her recent article "Central Kitchen Solves Problem of Small School."

2½ for salad or dessert use, as tidbits for salads and fruit cups, in the crushed form for desserts and pies, as "fingers" for salads and garnishes, and "tree-ripened" for desserts. In similar manner, peaches may be specified 28-30 size for counter use and a 35-40 size for salad use.

Vegetables will vary similarly in the type of pack. For instance, asparagus is available in soup cuts, graded tips and in fancy large tips in either the white or green color. Tomatoes must be specified in a fancy grade solid pack if a tomato with firm large pieces is desired. An extra standard pack will be suitable for some requirements, and a purée form is adapted to sauces and soups.

Among the interesting new devel-

opments in canned goods certain types of relishes are worthy of note. Included in those of especial interest are the tiny melons in several counts, the melon mangoes, pickled cantaloupe or grapefruit rind and honey dew melon. Such garnishes add variety to the menu, and their use is justified when the budget permits.

It is evident that the purchasing of food supplies in the past few years has become chiefly a matter of utilizing available technical information in a wise manner. If the factors affecting market changes are understood, and the varying market trends and conditions are carefully followed, purchasing may be adapted to daily needs and a menu of greater interest and uniform standard maintained.

CONVENTION REPORT ..

Unusually Large Attendance at Meeting of Department of Superintendence, N. E. A.

THE unusual winter weather did not dampen the spirits or decrease the anticipated attendance at the sixty-ninth annual meeting of the Department of Superintendence and allied groups at St. Louis last week. Even the opening sessions on Sunday afternoon and evening were unusually well attended.

The conventional address of welcome by Supt. Henry J. Gerling of St. Louis was followed in the afternoon by two inspiring speakers, Chancellor Frank P. Graves of the University of the State of New York and President Glenn Frank of the University of Wisconsin. Doctor Graves presented a life membership in the Department of Superintendence to Dr. Herbert S. Weet, superintendent emeritus of the public schools of Rochester, N. Y., in honor of his unusual contributions to education.

In the evening the massed church and school colored choirs of 600 voices sang spirituals and folk and modern songs in a concert which rivaled that heretofore unapproachable Dallas program of the same type.

New John Dewey Society

On Sunday afternoon the newly organized John Dewey Society held its first annual meeting, presenting a strong discussion on the topic of teachers' loyalty oaths and listing enemies of education. George C. Counts, Columbia University, Editor William McAndrew, and Prof. Boyd H. Bode comprised the program under the chairmanship of Prof. William H. Kilpatrick. The new organization, to be devoted to the study of education and culture, is one of the few native educational organizations to be named after an individual. Its purpose, apparently, is to supplement in a broader and a more dynamic way the now highly conservative Society for the Study of Education, the vanguard of the last generation.

Another new organization, including specialists in public relations and social interpretation, was also organized and has made application to be admitted to the N. E. A. as a department.

Throughout the meeting it was obvious that the administrators of the country had come out of the depression

cyclone cellar of despair and were again taking a realistic view of things.

Recovery in most states has proceeded to such a point that even the question of federal aid to education received a calm and rational treatment as opposed to the hysteria surrounding it a few years ago. The symposium on this subject made an excellent program.

An Excellent Yearbook

The presentation of the 1936 Yearbook, probably the best piece of work yet produced by these committees, was based on the social studies curriculum and was well staged. An orientation speech, which placed Charles A. Beard much closer to the middle of the road group than heretofore, was followed by a well balanced panel discussion.

To keep the convention close as a working rather than a listening unit, President A. J. Stoddard arranged for thirty-six group discussions on Monday and Wednesday afternoons. Each of these meetings was purposely kept small to enable every member to participate in the topic under consideration.

The sixth general session on Tuesday afternoon was given over entirely to the report of Supt. Paul C. Stetson's committee on longer planned programs for the Department of Superintendence. This report redefined the objectives of the department, proposed new activities, decided to remain within the National Education Association, raised the issue of organizing an all-inclusive teachers' guild, changed the name of the department, and proposed a plan of preferential balloting for president in order to take this office out of politics. After discussion and explanation, action on the

constitutional report was postponed, in accordance with the rules, until next year.

Eleven convention papers are printed in full or in summary in the front section of this magazine. Abstracts of a number of other important addresses before the Department of Superintendence follow:

Norman Thomas, New York City:

In presenting the case for Socialism I have this advantage over my opponents: I can clearly distinguish between what we want and what they want. If there was anything logical or consistent about American politics and the relation of the two parties to each other there would be an immediate regrouping. If there was any logic in our political life it would be fantastically absurd, funnier than any farce on the stage, that we should have parties that unite under the same label—Herbert Hoover, Ogden Mills, William E. Borah and Fiorello H. LaGuardia, or on the other hand that other group of unhappy companions, Franklin D. Roosevelt, Alfred Emanuel Smith, Eugene Talmadge, Upton Sinclair, the Southern Bourbons, Tammany Hall and what have you.

Everybody who can read at all knows that the New Deal legislation which the Republicans now attack falsely as Socialist was enacted in some of its most important respects with the support of a majority of Republicans. Everybody with a memory longer than last week may also recall that it took a long time for Messrs. Hoover and Smith to find their voices in denouncing the New Deal.

There was a time, in fact, when the U. S. Chamber of Commerce itself cried out for pretty much the type of rescue that Roosevelt temporarily effected. They were in deep water and going down the third time. By hook or crook he managed to pull them in where they could put their feet on the sand. No sooner had they coughed the water out of their lungs than they began to curse because he pulled their hair.

This is no endorsement from me of the New Deal legislation. It is not even a statement that it was ideally the best



A. J. Stoddard



S. D. Shankland



Charles B. Glenn

that could be done under capitalism. It is a statement that by the pragmatic test it has temporarily saved capitalism more effectively than the old deal did.

But the Socialist case is clear. Neither the old deal nor the New Deal can save men and women and children from the fate of poverty in the midst of potential abundance, from fear of machines which extends unemployment and makes war more deadly not because the machine is a machine, but because it is owned and operated not for the use of all of us but for the private profit of an owning class. From the standpoint of the major interests of men: freedom, peace and plenty, both old deal and New Deal have failed.

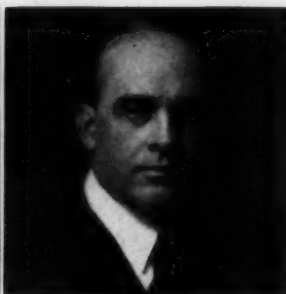
There is no reason to think that the present revival in business is more than temporary. It is burdened by a staggering load of debt. It is accompanied by a standing army of some 10,000,000 unemployed. It has solved none of our fundamental economic problems. It is only a question of time, and a short time, until we head into new economic catastrophe. And against that danger the critics of the New Deal have nothing to offer except to go back—which they can't do—to a slightly modified version of the old deal.

The real question is whether if we allow things to drift the United States will be plunged first into new economic catastrophe or into new world war. In either event the probabilities are overwhelming that we shall get Fascism, probably not called by that name, but closely resembling what is known as Fascism in Europe; that is to say, we shall get dictatorship, the religion of the totalitarian state, the emotional appeal of a mystic jingoistic nationalism, the economics of state capitalism enforced by demagogues who begin by appealing to the little man as against the big man and end by regimenting the little men as never before.

All this will be carried on in an atmosphere of intolerance. The parts of this picture puzzle of Fascism are lying about. We need only the time and the man to put them together. There is nothing in the Democratic or the Re-



Frank P. Graves



Glenn Frank



Charles A. Beard

publican program to guarantee us against the coming of that Fascism.

Glenn Frank, President, University of Wisconsin:

From widely separated quarters of the Right and Left have arisen Americans who demand that the public schools be made agencies of propaganda. The Americans from the Right, who are advancing this notion of the schools, want the schools to become agencies of propaganda for their particular concept of the traditional social order.

The Americans from the Left, who are advancing this notion of the schools, want the schools to become agencies of propaganda for their particular brand of new social order, usually a social order based upon some measure of collectivism.

I am against both these groups.

James Edward Rogers, National Recreation Association:

Education should not only be training to gain a livelihood, but it should be a rich experience in the art of living. True education should be concerned with life itself; it should be joyous, vibrant and realistic. In these thrilling times of fundamental changes in our national institutions, certainly the school must be prepared to train youth to live realistically in a real world.

Unfortunately, however, in spite of the many progressive school systems throughout the country most of our schools are still in the lock-step of tradition. The curriculum is still in the strait-jacket. Many still worship the

little red schoolhouse and the sacred 3 R's. We threw out the so-called fads and frills when we needed them most during the trying years of this depression. We must change our points of view. The social studies, music, avocational education, recreation become the essentials in this New America and this New Day. They are the necessities if we wish to train our youth for modern living.

Education is functional. It is a process of learning through doing, achieving and living. Our attention should not be devoted solely to the development of skills and techniques but should be given to the handling of life situations as a whole. We still separate the school from the community and this distinction is a pernicious one. We still have the cloistered attitude of the monastic who live apart from the community. School and community are something separate and different. This should not be because they are one and the same. Society has given a mandate to both school and community to foster a richer and finer living in America.

Fred C. Ayer, Professor of Education, University of Texas:

No one questions the desirability of secure tenure for competent teachers. Unfortunately, the so-called permanent tenure laws guarantee tenure but not competency. Practically all of the claims made concerning the desirable results of permanent teacher tenure have run counter to the facts. It has been shown time and again that it is practically impossible to dismiss incompetent teachers under a system of permanent tenure.

Holmstedt's study, for example, reveals that the dismissal of unsatisfactory teachers was the greatest and most aggravating problem faced by New Jersey officials as a result of the permanent tenure law.

In Chicago, which comes under the Illinois tenure law, only fourteen educational workers were dismissed during the twelve-year period ending in 1932. In commenting upon the dismissal of only



Paul R. Mort



Charles H. Judd



L. D. Coffman



Arthur G. Crane



Kirtley F. Mather



Agnes Samuelson

four teachers in a given year in Chicago, William McAndrew said, "But it seems incredible that only .03 per cent out of 12,000 teachers indicates the number whom the board should separate from service on the ground of inefficiency."

Minnesota cities have likewise had few cases of dismissals since the enactment of the state law. As Cubberley points out, nearly all permanent tenure laws provide for dismissal of a teacher for incompetency, but that if dismissal is attempted when a permanent tenure law exists, the accusing officer and not the teacher is in reality put on trial.

Since the number of competent teachers who are arbitrarily dismissed because no tenure law exists is much smaller than the number of inefficient teachers who are retained under a permanent tenure law, the welfare of more pupils is impaired when a tenure law is in effect. Moreover, the mere fact that a teacher is successful is no guaranty that he will remain successful. No teacher should object, after passing the probationary period, to a re-evaluation of his services every three or four years. In this way he would still have the advantages of permanency and would not be tempted to "settle back on his oars and drift with the tide."

George D. Strayer, Teachers College, Columbia University:

Democracy will endure if it keeps its promises. The founding Fathers believed that it was possible to establish a society in which life, liberty and the pursuit of happiness were guaranteed to all. They knew that government based

upon the consent of the governed could be maintained only if education was provided for the entire electorate.

Freedom from the interference of government is no guarantee of equality of opportunity. It is easy to understand how the tradition of noninterference on the part of the government was associated in the pioneer mind with opportunity. So long as there were unlimited resources available to those with the strength and determination necessary to overcome the obstacles encountered in advancing the frontier, opportunity knocked at every man's door.

We now accept the responsibility of government for education, for health service, for the use of "the natural endowment of the nation, and the technical arts for the promotion of the general welfare and for the creation and maintenance of the highest possible standard of life and well-being for all the people . . ."

We may not rest satisfied with the current situation. It is our obligation to work with all men of good will for the realization of the ideals of our democracy. We shall have to secure more of support locally, in the state and in the nation. Even in the period which lies ahead when the burden of taxation promises to increase, we shall have to stand for larger support for education, for health service, and for recreation for children, for youth and for adults. The promise of democracy must be kept if democracy is to endure.

There is no easy road to the realization of the democratic ideal. We cannot turn the matter over to a benevolent

dictator. The process must be worked out in hundreds of communities under the leadership of tens of thousands of our fellow citizens. The burden of financing these enterprises must be equitably distributed among all of our people. State and national support must be added to local support. But if democracy is to endure, the local control of the social process of education and of the techniques of educational procedure must be preserved.

The issue of centralization in the control and administration of American education is not academic. In recent years, particularly since the enactment of the Smith-Lever law in 1914, there has been a dangerous tendency in this direction. By the provisions of the Smith-Lever Act, the secretary of agriculture was vested with discretionary authority in the approval of plans for state extension projects.

Let us look at the situation without prejudice. Control by the federal government is real.

Does anyone believe that the employees of the Agricultural Extension Service are free to teach or to write critically about federal legislation relating to agriculture?

Is it reasonable to propose that those who are employed under the Smith-Hughes Act are as certainly developing their courses of study and methods of instruction in the light of local needs as they would were they free from federal supervision?

Does anyone doubt the possibility of using the Agricultural Extension Service, the Smith-Hughes program, the CCC camps, or the National Youth Administration for partisan or class propaganda?

We have in these laws the development of exactly the sort of organization that lends itself to the methods employed by those who seek to control opinion from a national center. The time has arrived for our profession to call attention to the dangers inherent in the legislation already on the statute books placing control in the federal government. We shall do well to call for the repeal of those sections of the laws that place control in the hands of federal authorities. It is high time that we demand that the complete control of education, free from interference or domination by the federal government, be returned to the people of the several states.

Lester H. Dix, Associate Director, Lincoln School, Teachers College, Columbia University:

The administrative problem of scheduling salaries raises the basic economic problem of a proper income for teach-



John W. Studebaker



David E. Weglein



Carroll R. Reed



WHY TEACH PRINTING?

ONE DOZEN REASONS

A School Printing Department is as vital to the Educational and Social Life of the school as the newspaper is to the community, BECAUSE—

1. The School Printing Department is a Publicity Medium under school control—providing an opportunity to interpret school life and ideals to the school public, and enabling you to sell more completely your Educational program to your community.
2. A course in Printing motivates and coordinates with all academic work. It is a course in Applied English, Applied Art, Applied History and Geography. It requires clear and orderly thinking in the preparation of forceful composition.
3. It deals with information and therefore has unusual informational value.
4. The Printing activity is especially strong in habit-forming values such as accuracy, neatness, correctness in English construction, honesty and truthfulness, all of which are leadership qualities.
5. Through the working of hand and brain, it forms a sense of proportion, an appreciation of lines and curves, a balance of perspective, an appreciation of the fine arts as exemplified by the greatest of fine arts.
6. The widely varied activities in the School Printing Laboratory, such as presswork, composition, proofreading and art, provide for many individual differences.
7. In the organization and preparation of the school paper, each pupil becomes vitally interested in a civic enterprise by and for all concerned. This group interest provides for the development of cooperative values.
8. In the Printing Laboratory is developed an appreciation of one of the most important of our major industries. This is a consumer value, and all of us are consumers of Printing.
9. Good printing requires foresight in planning, initiative, stick-to-it-iveness, and an understanding of human reactions to the printed page. It develops the complete personality.
10. Printing, "The Mother of Progress," and Education are inseparable. This activity provides the opportunity to apply the "Learn by Doing" philosophy to our teaching methods. Learning by Printing is Learning by Doing.
11. It serves as a means of socializing the life and interests of all pupils in the school, serving as a clearing house for ideas and accomplishments.
12. A Laboratory of Printing in your school would provide an activity unit rich in cultural and general educational values. You can't afford to be without it.

Department of Education

AMERICAN TYPE FOUNDERS

ELIZABETH, NEW JERSEY

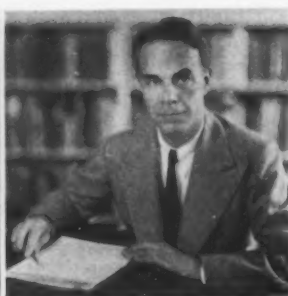
Types used: Stymie Black and Italic, Century Schoolbook



Paul C. Stetson



Louis P. Benezet



Edwin R. Embree

ing, which in turn raises the general economic problem of the distribution of income. This general problem can never be solved in terms of one group alone.

Our existing capitalistic economy determines a framework within which teaching income must be placed in accordance with the best theory of laissez-faire economics. A teacher should be paid in accordance with the economic scarcity value of the native intelligence demanded for the teaching function. If all occupational groups were paid in accordance with this theory, the aggregate national income would be raised to its highest point. Moreover, occupational incomes would tend to reach such levels in the absence of monopolistic controls.

In accordance with this theory teachers are underpaid. If they are to bring their income to its "fair" level, they must: (a) limit their numbers to demand, and (b) organize for political solidarity.

From the social point of view, they should be content when they have reached their theoretical optimum income. Refinements of the general theory will also describe the proper relationships within an individual salary schedule.

The alternative theory of payment according to need is not economically justifiable under laissez-faire conditions because needs are not directly related to the state of productivity at any time, and secondarily because the criterion, need, indicates no proper maximum.

American Educational Research Association

Dr. Harry Greene, University of Iowa, was elected president for the 1937 meeting; David Sutton, Ohio, vice president, and Dr. William G. Carr was re-elected secretary-treasurer.

Paul R. Mort, Director of the Advanced School of Education, Teachers College, Columbia University:

Local initiative has a traditional rather than a rational origin with us. Discussions of it are vague. It is referred to as a right, although our state

constitutions seem to belie this. It is supported also because of its supposed value in encouraging experimentation and in directing a control too complex for a dictatorial individual or group to seize. Whatever may be its defensibility as a sort of national right or as a means for avoiding political control, there seem to be large claims for it based on its utility in encouraging experimentation. By encouraging experimentation it is supposed to bring about a continuous adaptation of schools to changing needs. Such vast changes as have occurred in secondary schools in the past few decades, for example, are doubtless more fully attributable to local initiative than to the insight and leadership of central authorities.

It is time that we appraised local initiative from this utilitarian angle. How effective is it in maintaining educational efficiency? The facts on this should clarify the atmosphere. If it is not as valuable as we have believed it to be, we should be on the lookout for effective substitutes. If it should prove indispensable as a means for maintaining efficiency in our schools, we shall have a factual basis for opposing this tide of limitation that has come down upon us, and of supporting wholeheartedly the tax reforms and reforms in school organization necessary for its efficient operation.

Harl R. Douglass, Professor of Secondary Education, University of Minnesota:

Students are being admitted in large numbers into professional schools of institutions of higher education who have

little chance of succeeding in the courses offered. The failure of these young people not only is a waste of the resources of the institutions but the effect upon the students, victims of this method of eliminating those of lesser ability, is serious and undesirable.

Better means are available for the selection and rejection of applicants for admission to the professional schools than are being used widely at present. It is not possible to determine with any degree of accuracy what chances a prospective student has of succeeding in any given professional school by means of his previous record of scholarship. This procedure is little better than guesswork.

By use of the Minnesota Legal Aptitude Test and similar tests for schools and colleges of medicine, nursing, dentistry, pharmacy, education and business administration, and the General College, the prediction of the probable scholastic success of applicants for admission has materially improved.

Department of Vocational Education

Arthur B. Mays, Professor of Industrial Education, University of Illinois:

Because of the significance of industry as a conditioning factor in modern life, industrial education as part of the total field of education must become increasingly a center of social concern. Some of the major problems of trade education are:

1. More recognition must be given to the rapid substitution of machine processes for hand processes in all departments of production. The skills most needed in modern industry are analytical and adjustive in character rather than creative.

2. A growing need for more effective instruction in scientific and technical facts is apparent.

3. The problem of the wise selection of those who are given industrial training is yet to be solved. It should be available only to those who are reasonably sure of their vocational choice and who possess at least minimum qualifications for successful work.

4. Much more attention should be



Leon N. Neulen



Ben G. Graham



F. H. Bair

In Korea



SCHOOL
CHILDREN
IN
KOREA

To exclude knowledge of things of which
we disapprove is to limit education.

Royal

"THE FINEST SINCE '97"

Write for catalog of

MODERN SCHOOL SEATING
for
MODERN AMERICAN SCHOOLS

ROYAL METAL MFG. CO., 1132 S. Michigan Ave., CHICAGO—Also New York and Los Angeles

given to the development of economic and social intelligence among industrial workers.

5. Training programs need to be much more closely related to employment demands.

Department of Secondary School Principals

Charles F. Allen, Supervisor of Secondary Education, Little Rock, Ark.:

Returns from a questionnaire as to the studies that the Department of Secondary School Principals should undertake indicate that first emphasis should be given to a follow-up study of the report of the committee on the orientation of secondary education, and next emphasis should be given to the co-operative study of secondary school standards. A subcommittee should be appointed whose duty it shall be to investigate and recommend to the executive committee of the Department of Secondary School Principals specific studies and the procedures for effecting them. This committee would also suggest practical means of informing the public concerning the real merits of secondary education.

Harl R. Douglass, Professor of Secondary Education, University of Minnesota:

The American school system needs to be much better articulated into a unitary, continuous institution than it now is. Historically it consists of the old academy, made public in control and support, thrust upon an eight-year elementary school borrowed from the German *Volkschule*, and capped off with the hybrid American college and university — partly borrowed from Europe but partly developed to make up the deficiencies of secondary education.

The program of each of the units making up the so-called American ladder is not articulated with others and is loaded with duplication, particularly between high school and college.

The staff and administrators of the different units of the school system need to reverse their thinking about education



Alfred D. Simpson



Charles H. Lake



Worth McClure

so as to see it as a gradual, unitary, articulated, continuous process, not a series of separate schools, each operating more or less independently from the rest. There is no sharp dividing line between elementary and secondary education, or between secondary and higher education, except in the minds of those who have lost their perspective.

Sidney J. Williams, Director, Public Safety Division, National Safety Council:

The question before us all is this: How can we most effectively impart the skill and understanding that will enable pupils to avert the tragedies that are occurring all around us? The elementary schools have already done a splendid job in teaching safe pedestrianism. The beginning driver, who is usually a high school pupil, thus appears to be your opportunity and your particular responsibility.

The decrease in accident ratios in athletics under high school and college coaching shows that tremendous benefits may accrue through teaching safety as it pertains to the industries and highways. Venturesome youth needs your reminder that it is not sporting to take foolish chances with one's life — or with any other life.

Safety must be considered in terms of a well rounded program, rather than merely teaching how to drive an automobile, for the hazards in the home, the shop, the playground and the street are equally important. Many schools that teach motor mechanics need to teach the principles of safe driving also. Many of

the driver-training courses in vogue are rather superficial and I believe that public schools that really address themselves to serious safety training courses might find the motor car manufacturers ready to cooperate. Some pupils would be willing to contribute the use of a car for demonstration. School funds could easily manage other materials and the National Safety Council will give all the information and advice that are available.

F. T. Spaulding, Associate Professor of Education, Harvard University:

The competence which the world outside the school requires of the boy or girl who has just left school is not an ability to step at once into an involved and intricate job, but such capacity as will enable him to make a promising start in some recognized field of work. This capacity involves ability to get along tactfully and intelligently with employers and with other employees, adaptability (which includes ability to learn on the job), and sufficient skill to ensure employment at whatever the bottom of the chosen field may be.

In the light of the present demand for initial vocational competence, the senior high school must recognize its obligation to see that the educational program of every boy and girl provides for the development of such competence.

The senior high school must also recognize its obligation to see that no pupil leaves school, so far as the school itself can prevent it, until he has attained a vocational competence sufficient to allow him to make a beginning in self-support, and until he himself knows how and where to make that beginning. Every secondary school ought to find out for itself, every year, for which of its pupils that year will represent the last year of regular schooling. For every pupil who has no more than a year of schooling left, the final year should be devoted as directly as may be necessary to the development of initial vocational abilities. Moreover, within this year occupational survey courses should be provided which will give each pupil a definite and usable knowledge of the vocational opportuni-



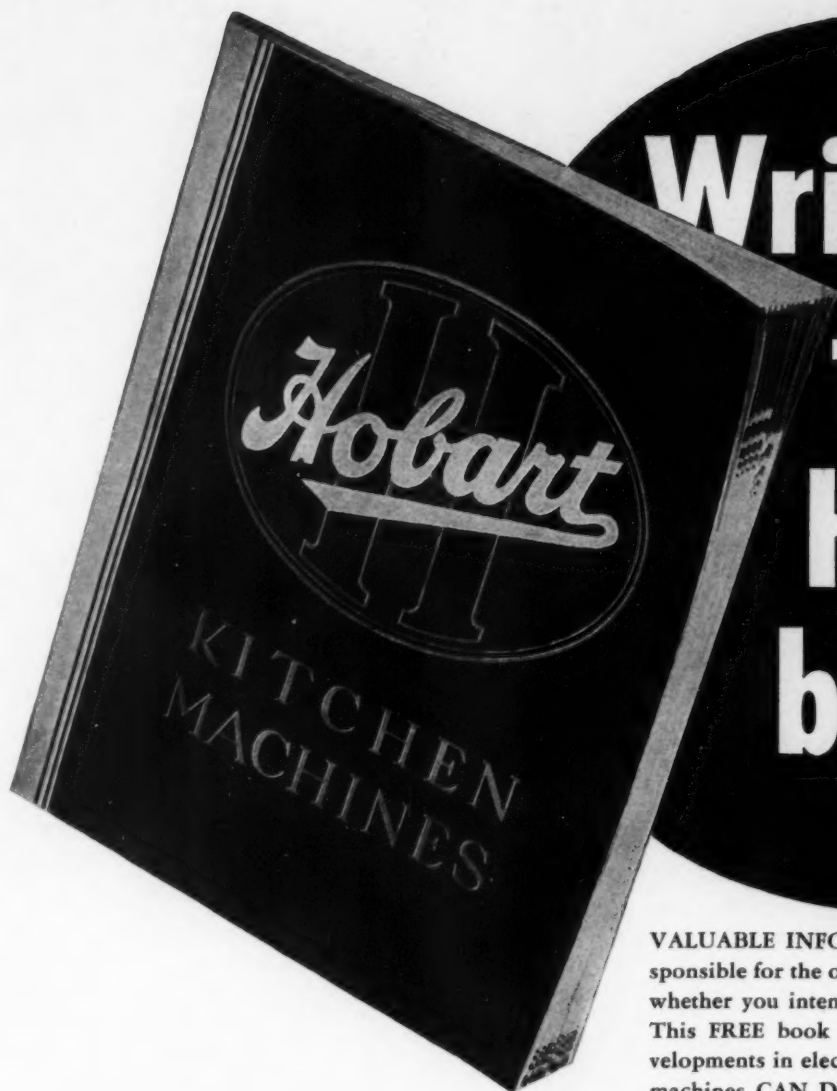
Bertram E. Packard



John A. Sexson



Sidney B. Hall



Write for this new Hobart book

VALUABLE INFORMATION highly interesting to anyone responsible for the operation of a school kitchen—large or small—whether you intend purchasing new equipment at once or not! This FREE book covers today's newest improvements and developments in electric kitchen machines! Tells exactly what such machines CAN DO FOR YOU...

MIXERS Better and more appetizing food quality; important savings of time and materials! Discover how you can select a particular model or models of these improved machines, to meet your own special needs exactly. Eight models, each with interchangeable bowls, provide a range from 3-quart to 110-quart capacity. Each handles many Attachments of wide usefulness, including the famous Air Whip Attachment for Hobart Mixers only.

PEELERS To peel a few potatoes, or up to 45 pounds—in one to three minutes peeling time—WITH NEGLIGIBLE PEEL LOSS and therefore big savings—choose from 3 models. Hobart offers the only Bench Type Potato Peeler... for limited space. Quiet, clean.

SLICERS See how these machines, with a dozen outstanding features of practical value and quality construction, enable you to predetermine costs, by precise regulation of slice thickness. Two models.

DISHWASHERS How to modernize your dishwashing pantry, maintain the highest degree of cleanliness, and at the same time make very definite savings! Ten different models of Hobart-Crescent Dishwashers—and Glasswashers!

AIR WHIP Finer quality and greater yield of Whipped Cream by an exclusive method of whipping. And—the Air Whip Attachment for Hobart Mixers (only) gives finer texture—increased volume and better keeping qualities to cakes, icings and meringues.

FOOD CUTTERS Chop up meats, vegetables, firm fruits, nuts and other foods in split seconds. Operate large, practical attachments, including Vegetable Slicer, Meat Chopper, Coffee Grinder, etc.

HOBERT
GIVES MORE
FOR THE
DOLLAR

SOLD BY
LEADING
KITCHEN
OUTFITTERS

THE HOBART MFG. CO.,
1003 Penna. Ave., Troy, Ohio

Please send me new "Kitchen Machines" Book free—no obligation.
Am interested in ☐ Mixers ☐ Potato Peelers ☐ Slicers ☐ Dishwashers ☐ Glasswashers ☐ Air Whip ☐ Food Cutters.

NAME _____

ADDRESS _____

CITY AND STATE _____

ties likely to be open to him when he steps out into the world.

National Society for the Study of Education

The National Society for the Study of Education presented its thirty-fifth Yearbook at the St. Louis meeting. The Saturday evening meeting was devoted to Part I, "The Grouping of Pupils," a well balanced report prepared under the chairmanship of Warren W. Coxe. Part II, presented at the Tuesday evening meeting, was devoted to music education. Dean Willis L. Uhl, University of Washington, was chairman of this committee.

George R. Johnson, Director of Tests and Measurements, Board of Education, St. Louis:

St. Louis does not group children for instruction on the basis of similar abilities determined by mental measurements. Instead, the grouping is by the level of advancement through the grades.

1. Children having the same general intelligence differ too widely in their educational needs to permit grouping by ability. Health, life interests, special aptitudes, many other personal qualities determine educational need. While the special abilities of children tend to be high or low according to the general abilities, the exceptions are too outstanding to be ignored. Great capability in some particular field is found in some cases where other abilities are low. Actual ability grouping does not exist, therefore, with reference to specific activities to be performed; it can exist only with reference to the mathematical formula which produces it.

2. Classifying children on a basis that implies similarity of ability presupposes mass teaching and tempts teachers to forget the individual, but every child's greatest need in education is recognition of his individuality.

3. Ability grouping based on mental measurements is undemocratic according to American ideals and practices. Life offers no other situation in which people must segregate themselves according to intelligence quotients. People play together, work together and worship together. Why not study together in the schools? Mixed groups are preferred to ability groups since they reflect the social ideals of the present age and of the community.

4. Low ability groups in a school system created under the guise of scientific procedure are usually known by humiliating names. The effect is similar to that of the ancient dunce cap and unwholesome from the standpoint of men-

tal health. It is important that children be kept from developing a feeling of inferiority, or, for that matter, any exaggerated feeling of superiority; but ability grouping as an administrative device impresses upon children the idea that they are different, so different that they must be educated in a segregated group.

The ideal action toward which the schools are striving is to give every child, dull or bright, the right to pursue school work with reasonable joy and with the possibility of success. Teachers can serve the needs of children better when their superior officers throw the modern dunce caps in the waste basket, cast aside the idols of uniformity, and grant to the teachers the freedom to warp the curriculum or even to wink at minimum essentials whenever the welfare of an individual child is at stake.

National Society of College Teachers of Education

L. A. Pittenger, President, Ball State Teachers College, Muncie, Ind.:

Teacher supply and demand is part of the general social development of our country. The surplus of professionally trained men and women threatens to destroy the profession they seek to serve.

Very little is done by the states in the matter of estimating and controlling teacher supply and demand, but answers to an inquiry to the state departments of instruction show that the states that have a monopoly on teacher education are doing a good job of estimating and controlling.

Many obstacles interfere with any procedure of estimating and controlling teacher supply and demand. The most direct method to employ in estimating and controlling the supply of and demand for teachers would be for the legislatures of our various states to pass mandatory laws, but this is not to be expected. A plan that requires the co-operation of state departments, state boards of education, colleges preparing teachers, high school principals and teachers and employers of teachers is feasible.

State officials should set a minimum requirement of four years of preparation for all certifications to teach, repeal life licenses, or have them validated every five years, require annual registrations of all teachers and accredit only reliable institutions to prepare teachers.

These institutions should adopt a policy of quality as opposed to quantity production. Selection of prospective teachers should begin in the high school. Employers of teachers should be educated to the point that they will make

their first responsibility the welfare of the children in the schools. When employers take this view they will employ only high-grade professional teachers.

P. E. A. Forms Commission on Educational Freedom

A commission on educational freedom has been formed by the Progressive Education Association to lend financial and legal aid to teachers and other educators dismissed from their positions because of their political, economic or social beliefs.

It is proposed that the commission organize and carry on an educational program to acquaint the lay public and professional groups with the need for educational freedom for teachers and students and to investigate reported violations of academic freedom and make known the findings of the investigation.

Dr. Goodwin Watson, Teachers College, Columbia University, has been appointed chairman of an executive committee of ten persons. Other members are Frank Baker, State Teachers College, Milwaukee; Wilda Bayes, New York City; Russell Babcock, Winnetka Public Schools, Winnetka, Ill.; Boyd H. Bode, Ohio State University; Clyde R. Miller, Teachers College, Columbia University, and Willard W. Beatty and Frederick L. Redefor, ex officio. Two classroom teachers are to be elected.

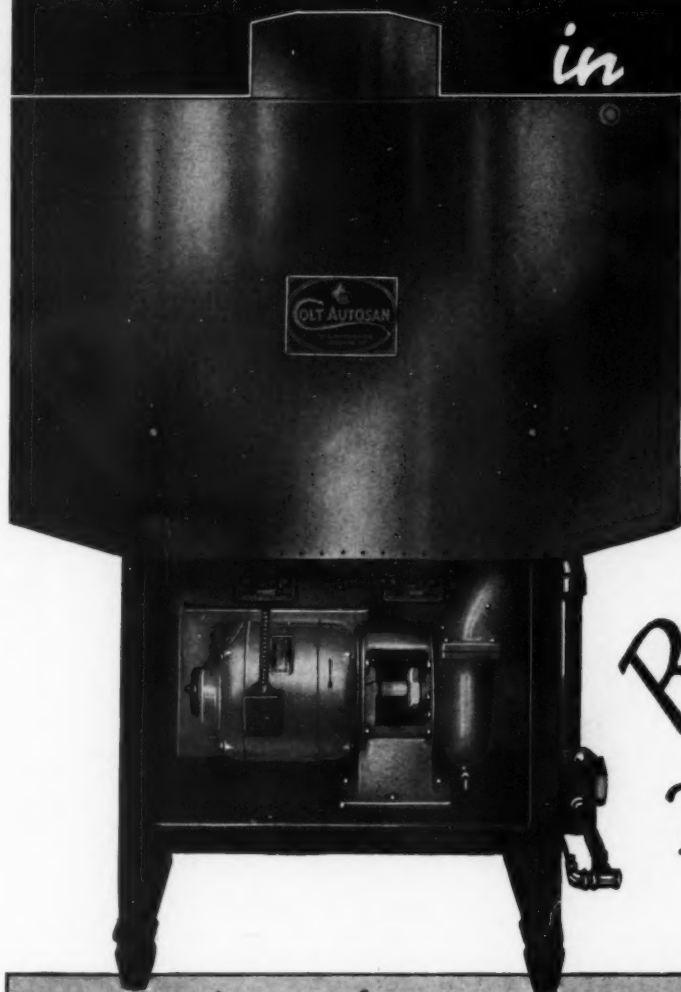
Exhibitors Name Officers

J. O. Bengston of the Chicago Apparatus Company was elected president of the Associated Exhibitors at the Department of Superintendence meeting in St. Louis. President Earle F. Opie of the American Crayon Company was made vice-president, and R. J. Roundtree of the A. B. Dick Company became secretary-treasurer. Alfred O. Brown of the Public School Publishing Company was named a director. The election was held at the close of one of the largest and most successful exhibits ever held during an N. E. A. convention.

New York City Schools' Report

"All the Children," the thirty-seventh annual report of the superintendent of schools of New York City, is a 147-page book, in size and make-up similar to *Fortune*. Its profusion of photographs, line drawings and graphs visualize the problem of city schools: the hungry child, the delinquent, the truant, the physically handicapped and the need for food and organized play, as well as the three R's.

MORE *and* BETTER WORK in LESS SPACE



The New RC-1 Colt Autosan *with* Tandem SPEED DRIVE

... takes the guesswork out of dishwashing

The new RC-1 Colt Autosan takes up less space in your kitchen than any other conveyor type dishwashing machine made. It is compactly built—and equipped with a unique TANDEM Speed Drive that makes dishwashing doubly certain—faster and more economical. The RC-1 is built for the most exacting and the most strenuous service—ready to go into your kitchen and knock your dishwashing problem into a cocked hat.

The new Tandem Speed Drive with which the RC-1 is

equipped, speeds up washing and rinsing—and makes spotlessly clean tableware a certainty. As the tableware passes through the washing bath, it travels at a speed of four feet per minute. Then, on entering the rinsing sprays, it speeds up to eight feet per minute. Time is saved—hot water is saved—and you are saved the embarrassment of soiled tableware, by this simple and ingenious device. Racks are carried beyond rinse spray trip—automatically shutting off hot rinse water. Automatic start and stop in case of obstruction. The Tandem Speed Drive is sturdy, silent in operation and fool-proof.



PRICES:

In Galvanized Iron—\$650.00
In Stainless Steel—\$795.00

Overall Dimensions:
Length 42 in. Width 27
in. Height 62 in.

Mail this coupon today for full details →

COLT'S PATENT FIRE ARMS MFG. CO.
AUTOSAN MACHINE DIVISION
HARTFORD, CONNECTICUT, U. S. A.

Colt's Patent Fire Arms Mfg. Co., NS-16
Autosan Machine Division,
Hartford, Conn.
Sir: Send full description of the new
RC-1 Autosan dishwashing machine.
We feed approx. _____ persons per meal.
Name _____
St. & No. _____ State _____
City _____

Trade Exhibit Shows That School Market Is Sharing in General Business Upturn

THE curtain ascended upon the 1936 trade show of the N. E. A. to the rousing accompaniment of "Happy Days Are Here Again." Hardly had the scene in the Municipal Auditorium, St. Louis, unfolded before its large audience of interested school people than it was evident that the school market, in line with business in general, had staged a definite come-back.

Unmistakable signs of renewed faith revealed themselves at every turn—in the number of exhibits, more than 200 in all and with seventy-five more spaces occupied than last year, in the variety of products featured, in the manner of their presentation, even in the very tone of voice with which the exhibitor answered the questions that were put to him. And if added proof of confidence were needed it is necessary only to point to the exhibit of a school architect, representative of a profession returning to the fold after several years' absence.

In addition to its size and strength, another characteristic distinguished the 1936 exhibit from those of other years. It was distinctly modern throughout, executed in streamline form, painted in great gobs of bright yellow and orange set in mountings of shining metal and presented with visual aids for greater effect. The result was impressive, and productive.

This year it was the manufacturers' aim to present their products approximating as nearly as possible actual working conditions. What therefore at first glance appeared to be a group of children studying under the supervision of a teacher turned out to be an exceedingly effective demonstration of modern seating designed to ensure proper vision.

In another exhibit a startlingly lifelike figure of a workman was industriously operating a plane. Not only were manikins employed to portray graphically the use of shop tools but to tell other stories as well. Farther down the aisle a group of young women were dexterously transforming seats to permit the use of the study hall as an auditorium.

Every exhibit held something of interest. An automobile truck manufacturer surrounded his chassis with large illuminated colored views showing its dependability in all climatic conditions from mountain top to desert. The presence of two school bus bodies completed his story. Incidentally it is surprising what streamlining is doing to school bus design.

Laboratory equipment, it appears, is going in for plain surfaces and rounded

edges, all contributing toward lower maintenance costs. One manufacturer set up a sectional laboratory for the benefit of visitors, complete with blackboards, fume hood, built-in equipment, instructor's demonstration desk, chemical and physical laboratory tables and balance tables.

Rubber printing plates are the latest thing in printing circles. They look practically the same as metal cuts only instead of a metal plate nailed on a wood base they consist of a red rubber plate glued on a wood base. This material may be had in standard sizes with the necessary tools in compact sets.

Gray and black are fading from graduation gowns, and in secondary schools the colors of the school are substituted for them. Thus the once sedate gown assumes new life and in consequence is more popular with the student body. All sorts and varieties of startling shades are likewise being introduced in band uniforms.

Book publishers went in for textbooks in a big way. These they displayed in settings designed to lure the passer-by from the aisle into the space and to encourage browsing.

To make their displays more realistic locker manufacturers swung open the

doors to show coats and hats hanging in place with books on the shelf and even an occasional lunch box tucked away in a corner.

This leads naturally to the matter of locks. Direct dialing is making it easier for those who become confused over which way they should turn. The object, too, is to move the lock to a position closer in line with the vision and to provide larger faces and plainer numerals.

Even the briefest mention of school equipment would be incomplete without some reference to visual instruction. Sound projectors assume new importance each year. With improvements and refinements effected successfully the compact, portable type of machine is rapidly winning new friends.

Plumbing equipment was not as well represented as might be desired, although much interest focussed upon wash fountains and drinking fountains as presented by one manufacturer. These great round basins into which a constant stream of water is projected enable the washing process to be handled quickly—and effectively. Both drinking and washing fountains are being offered in various effective precast materials. A suitable accompaniment to this display was discovered in another section of the hall where a line of soaps and soap products for school cleanliness maintenance was being displayed with good effect.

Coming Meetings

March 12-14—South Carolina Education Association, Columbia.

March 13-14—Junior High School Conference, New York University, New York City.

March 13-14—Private Schools Association of the Central States, Chicago.

March 19-21—North Carolina Education Association, Delegate Assembly, Raleigh.

March 20-21—Department of Superintendence, Oregon State Teachers Association, Salem.

March 25-28—Schoolmen's Week, University of Pennsylvania, Philadelphia.

March 26-28—Alabama Education Association, Birmingham.

March 26-28—Representative Assembly, Michigan Education Association, Detroit.

March 27-28—Nebraska State Teachers Association, Department of Superintendents and Principals, Department of Elementary School Principals, and Department of Industrial Arts Teachers, Lincoln.

March 29-May 2—Music Educators National Conference, New York City.

April 2-4—California Secondary School Principals.

April 6-9—Schoolmen's Week, University of Minnesota.

April 9-11—Tennessee Education Association, Nashville.

April 11—California Teachers Association, San Francisco.

April 14-16—National Catholic Educational Association, Cathedral High School, New York City.

April 15-18—Kentucky Education Association, Louisville.

April 16-18—Georgia Education Association, Macon.

April 18—Annual meeting of delegates, Massachusetts Teachers Federation.

April 22-24—Mississippi Education Association, Jackson.

Apr. 28-May 2—Association for Childhood Education, New York City.

May 18-21—American Association for Adult Education, New York City.

June 11-13—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.

June 28-July 2—National Education Association, Portland, Ore.

July 6-9—American Home Economics Association, Seattle, Wash.

Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.

Oct. 7-9—New Hampshire State Teachers Association, Littleton.

October 8-10—Vermont State Teachers Association, Burlington.

Oct. 22-23—Indiana State Teachers' Association, Indianapolis.

Oct. 22-24—Mississippi Education Association, Jackson.

Oct. 29-30—Maine Teachers' Association, Lewiston.

Oct. 30—Connecticut State Teachers Association, Hartford.

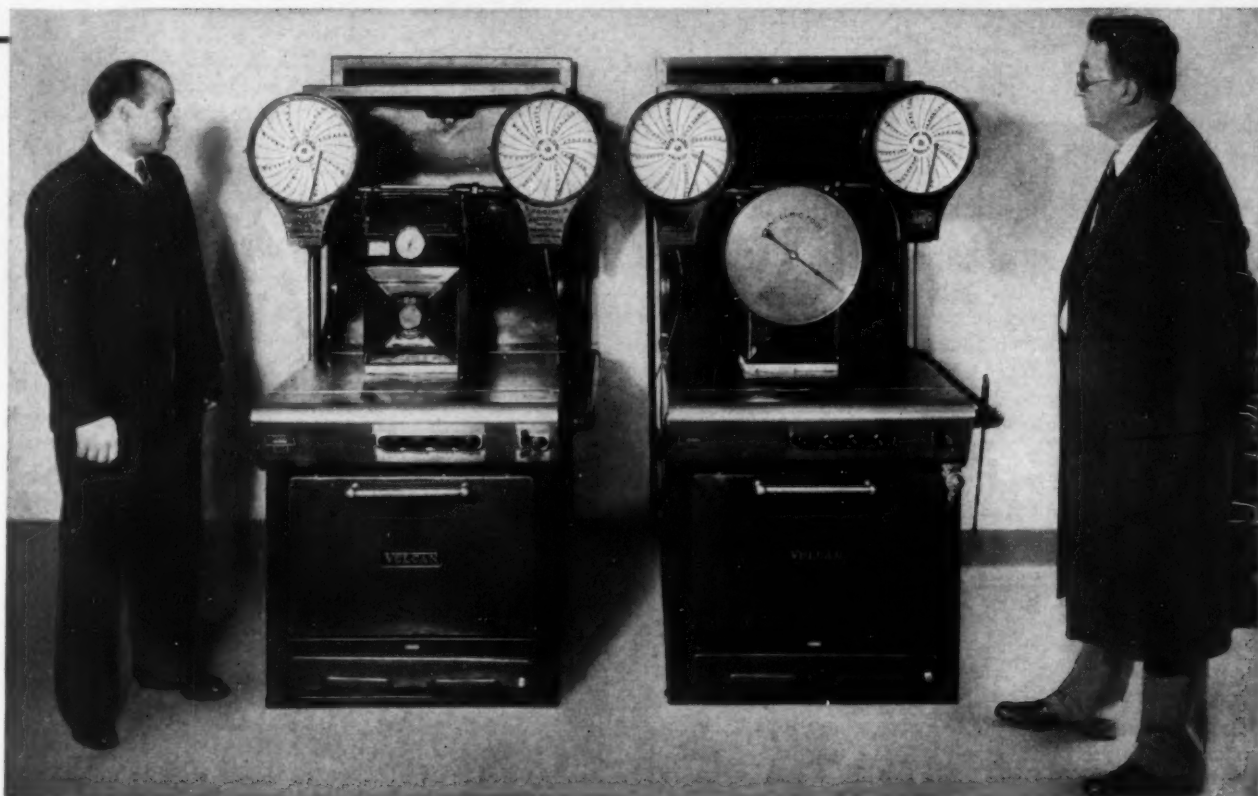
Nov. 5-7—Iowa State Teachers Association, Des Moines.

Nov. 5-7—Minnesota Education Association, St. Paul.

Nov. 9, week of—Delaware State Education Association, Wilmington.

DON'T GO ON WASTING MONEY!

*Here's proof of 38.7% saving on gas
under actual service conditions*



THE TEST Two Vulcan ranges, both same type, one insulated and equipped with thermostatic temperature oven control and the other without.

Two roasts of identical weight and quality. One roasted in each oven at the same time by a hotel chef.

RESULTS The range with insulation, and heat

control used 38.7% less gas. Also, its outer wall was 70° cooler than the wall of the other range.

This type range can also be equipped with top temperature control.

Investigate now and let us prove that substantial savings and more satisfactory results will be effected by the use of this new type equipment. It will pay for itself in a short time.

STANDARD GAS EQUIPMENT CORPORATION, 18 East 41st Street, New York, N. Y.

VULCAN

**COST-CUTTING EQUIPMENT MAKES
GAS THE MODERN EFFICIENCY FUEL!**

INVESTIGATE!

Hotel Department, Standard Gas Equipment Corporation
18 East 41st Street, New York, N. Y.

Please send me complete information about Vulcan
Equipment

NAME _____
ADDRESS _____
CITY _____ STATE _____
TYPE OF ESTABLISHMENT _____

NEWS IN REVIEW.....

Educational Projects Totaling Nearly \$2,000,000 Are Rapidly Being Organized

By ALICE BARROWS

During the last month, progress has been made in organizing the five educational projects for which \$1,983,000 were allocated to the Office of Education.

Bess Goodykoontz, assistant commissioner of education, who has general supervision of the university research projects, reports that invitations were issued by the Office of Education in February to 132 colleges and universities throughout the United States and in Hawaii to participate in the university research project for which a total allotment of \$500,000 has been made.

These projects are to be "of wide variety to be carried on under the supervision of professors or research directors." A sum of money based upon the size of the graduate school and the population of the community has been set aside as the minimum amount for each institution, although the final allotment will depend upon the number accepting the invitation and the availability of persons eligible for employment.

When a college or university undertakes a project, the president of the institution is authorized to name the institutional project manager who serves without pay and works directly with the Office of Education. He has general supervision of the project, makes periodic reports on progress and represents the institution in relation to the Office of Education. Ben W. Frazier, specialist in higher education, is the project director for the Office of Education.

Workers Largely From Relief Rolls

Research workers, primarily former graduate students and college graduates or former college students, may be employed on the projects. It is emphasized that "the professional and technical phases of research studies make it necessary that this type of work be done only by competent research workers." The executive order allocating the funds specifies that at least 90 per cent of all persons employed on a work project shall be taken from the public relief rolls, although the WPA may make exemptions to this rule if the number of

qualified workers cannot be obtained from the relief rolls. The wages for the research workers must be in accordance with the schedule for security wage workers. Usually these wages range from approximately \$50 to \$90 monthly.

Nineteen university research studies have been suggested by the Office of Education. Each institution is free to choose any one or more of the studies suggested. Each study will have a coordinator in the Office of Education and the conduct of the study will be planned cooperatively by this coordinator and the institutional sponsor. Up to February 5, thirty universities and colleges had signified their desire to carry on research projects. Nineteen studies have been suggested by the Office of Education.

Eight States Request Funds

As I reported last month, \$844,000 were allotted to the Office of Education for distribution to ten states to carry on studies which will provide a basis for reorganization of administrative units. Up to February 10, the following eight states had requested funds for such studies: Arizona, Arkansas, California, Kentucky, North Carolina, Ohio, Oklahoma and Pennsylvania. The person in general charge of the study in each state is nominated by the state superintendent and appointed by the Secretary of the Interior. In addition to the state director, there are an associate director and assistant director appointed by the state superintendent and paid out of the fund allocated for the study. The state director and his assistants constitute the administrative staff. There is a national advisory committee which consists of the state directors and eight other persons interested in the problems of reorganization of administrative units.

A manual of procedures of reorganization of local school units is now being prepared by the Office of Education and will be used as a basis for making the studies in each state with such adaptations as are required in the individual states. There is a central staff of ten persons in the Office of Education under the direction of H. F. Alves.

Sixteenth Annual Meeting of Junior College Group

The American Association of Junior Colleges held its sixteenth annual meeting in Nashville, Tenn., on February 28 and 29. Dean Fred W. Hosler, Canal Zone Junior College, opened the program on Friday morning with his talk on "Junior College Training for Available Positions." Walter C. Eells, Stanford University, discussed the articulation of secondary with junior college education and Max D. Engelhart, Chicago City Junior Colleges, spoke on comprehensive examinations in junior colleges.

Friday afternoon was devoted to sightseeing trips and Friday evening at the annual dinner Edmund Davidson Soper, president, Ohio Wesleyan University, spoke on education and social progress. The Saturday morning program theme was the "Social Adjustment of the Student," while the afternoon program was devoted to practical problems and a short business session of the association.

Northwestern Gets \$7,000,000

A gift of \$7,000,000 to Northwestern University has been announced by President Walter Dill Scott from the will of Roger Deering who died in February. The gift is without restrictions. The money will not be expended on buildings, it is said, but will go for educational purposes, particularly in the field of the social sciences. This large bequest is the culmination of almost sixty years of continuous giving to Northwestern University by the Deering family, whose business interests are in the International Harvester Company.

Business Education Conference

The fourth conference on business education will be held at the University of Chicago on June 25 and 26 under the auspices of the school of business. The subject this year is "Business Education for Everybody." Last year the conference was attended by 205 persons from twenty-one states.

Textbook Exhibit in New York

An exhibit of textbooks was held by the American Institute of Graphic Arts in New York City during the month of February, to show the improvements that have been made in textbooks from the printing standpoint, that is, typography, binding, illustration and design.

In Every Branch of school activity



EDUCATIONAL

Products from Graybar play an important part in the purely *educational* side of school life. Public Address Systems bring music, radio programs, or a speaker's voice into any or every room—as desired.

The Audiphone is used in special classes for the Hard of Hearing.

Graybar Household Electrical Appliances find a place in up-to-date Domestic Science Classes.



ADMINISTRATION

The Public Address System brings the Principal's Voice into every room. Less school time needed for announcements.

Graybar Inter-phones are the school's interior telephone system . . . Graybar supplied fire-alarms, buzzers, lighting, wiring, motors and control help keep school life running smoothly . . .

Whatever the product, if it's electrical, Graybar supplies it.



ENTERTAINMENT

At dances, entertainments, etc., the Public Address System proves invaluable. Picks up, amplifies, and distributes music from orchestra, record, or radio.

At the stadium, this system makes it possible for sports announcements to be heard everywhere clearly and distinctly.

Our specialists will be glad to help you with plans . . . installation problems. Write us for information.



Electrical products from Graybar fill every school need...

Graybar's service of electrical supplies covers every branch of school activity. This means more convenient, *economical* purchasing. Furthermore, Graybar's specialists, experienced in the school field, are always available to help you with difficult problems . . . No matter what the item, whether a fuse, a buzzer, or a complete Public Address System, you'll find it readily available from Graybar's roster of 60,000 electrical items. You'll find every product backed by a Graybar reputation for *quality* that goes back to 1869.

GraybaR
ELECTRIC COMPANY

OFFICES IN 78 PRINCIPAL CITIES: EXECUTIVE OFFICES, GRAYBAR BLDG., NEW YORK, N. Y.

PRIVATE SCHOOLS

Cruikshank Is Appointed New Head of Taft School

Paul Fessenden Cruikshank will succeed Horace Dutton Taft as head master of Taft School, Watertown, Conn., at the end of the school year, the board of trustees has announced.

Mr. Cruikshank is the founder and head master of Romford School, Washington, Conn., which was opened in 1931. He is a Yale graduate and former director of athletics and teacher of Latin at Hopkins Grammar School, New Haven, and at Gunnery School, Watertown.

Taft School is now operated as a non-profit institution by a board of trustees composed of alumni and friends. Last year's graduating class of 110 was enrolled in twenty-six different colleges.

Mr. Taft gave the school to a board of trustees in 1926, and two years later the sum of \$2,000,000 was raised for buildings and endowment and the present plant was completed.

The impending retirement of Mr. Taft, brother of the former president of the United States, was announced in December.

New Head Named for Spence School

Dorothy Brockway has been appointed head mistress of the Spence School, New York City, assuming her post after the close of the present academic year. She succeeds Mrs. E. Lloyd Sanderson, who was appointed temporary headmistress in October following the death of Miss Valentine Chandor. Miss Brockway is conference chairman of the Private School Teachers' Association and head of the mathematical department at Miss Hewitt's classes.

Founder of Asheville School Dies

Associated for thirty-six years with the Asheville School, Asheville, N. C., Newton Mitchell Anderson, co-founder and head master emeritus, passed away recently following a heart attack. Mr. Anderson founded the school in 1900 with Mr. Charles Andrews Mitchell, and with him served as co-headmaster until 1919 when he became sole head of the institution until 1924. At the time of his death Mr. Anderson was in charge of the alumni work of the school and editor of the *Asheville School Views*.

Milton Academy Builds Dormitory

Milton Academy, Milton, Mass., is building a new dormitory for girls at a cost of \$75,000. The three-story building will contain a suite of rooms for the head mistress, a room for the house mistress and accommodations for twenty-two girls. Eight pupils' rooms are double and several have fireplaces. The large study room is to have a fireplace; a playroom and a bicycle room will be located in the basement. The kitchen and maids' quarters are to be in the wing over the garage.

Experimental Schools Meet

The Associated Experimental Schools, of which the City and Country School, the Harriet Johnson Nursery School, the Cooperative School for Student Teachers, the Little Red School House, the Walden School, the Hessian Hills School and Manumit School are participating members, recently sponsored a dinner with Walter Duranty, Moscow correspondent for the *New York Times*, as guest speaker. Eduard Lindeman, instructor of social philosophy at the New York School of Social Work, discussed the experimental education movement. Dr. Henry Noble McCracken, president of Vassar College, presided at the dinner.

Glen Taylor School to Move

In preparation for the moving of the Glen Taylor School from Alameda to Walnut Creek, Calif., dormitories are now being constructed on the fifteen-acre site. A swimming pool, tennis courts, croquet courts and other playground facilities are being installed. The school is coeducational and offers grades one to eight. Curriculum and plant are under the direction of Mrs. Esther Reynolds Taylor.

Pupils Aid in School Projects

All undergraduates at Wilbraham Academy, Wilbraham, Mass., are being enlisted in some definite project each year, according to Charles L. Stevens, head master. The student body is to begin work immediately on an outdoor board track and straightaway which it is expected will be completed within a month. A second project to be completed this year will be announced later.

Thacher Head Master Retires

Morgan Barnes, head master of the Thacher School, Ojai, Calif., has announced his retirement. Mr. Barnes, who went to Thacher in 1903, after several years' service at Westminster College, Pa., became senior master in 1918 and head master in 1931. When the school was incorporated in 1924 he was made a trustee and has since been secretary-treasurer of the corporation.

Private School Conference

The Private School Association of Baltimore held its midwinter conference during February. Among those participating in the conference were Mrs. Chilton Powell, Roland Park Country School; Gordon R. Mirick, Lincoln School; William L. W. Field, Milton Academy, Milton, Mass.; Donald W. Goodrich, Calvert School; Mrs. Terry Burger, Greenwood School, Ruxton, Md.; Estelle Dennis, Dennis School; L. Thomas Hopkins, Lincoln School; William H. Kilpatrick, Teachers College, Columbia University; Edwin C. Zavitz, Friends College; Ben D. Wood, Educational Records Bureau, and Dr. Eunice Goddard, Goucher College. Hans Froelicher, Jr., The Park School, is president of the organization.

Andrews School Has Jubilee

Its silver jubilee was celebrated during February by the Andrews School for Girls, Willoughby, Ohio, a model vocational school founded in 1910 after ten years of litigation over the wills of Mr. and Mrs. Wallace C. Andrews, New York City, who left the bulk of their estate to found a school "to render girls self-supporting."

Kemper Cadets to Tour East

About fifty cadets will leave from Kemper Military School, Boonville, Mo., on March 14 on a ten-day trip through the East under the direction of Col. A. M. Hitch. The itinerary is to include visits to the United States Naval Academy at Annapolis and the United States Military Academy at West Point. From New York the group will go to Boston, Niagara, Detroit and finally to St. Louis and back to school.

Founder of Barnard School Dies

Katharine Hugenin Davis, co-founder and for forty years principal of the Barnard School for Girls, New York City, died at the age of ninety-nine years.

A Modern Sink Assembly for the Chemical Laboratory

This modern sink assembly reflects the Hamilton-Invincible policy of producing such equipment in related units wherever possible. It permits greater flexibility of arrangement, greater interchangeability of parts and service equipment.

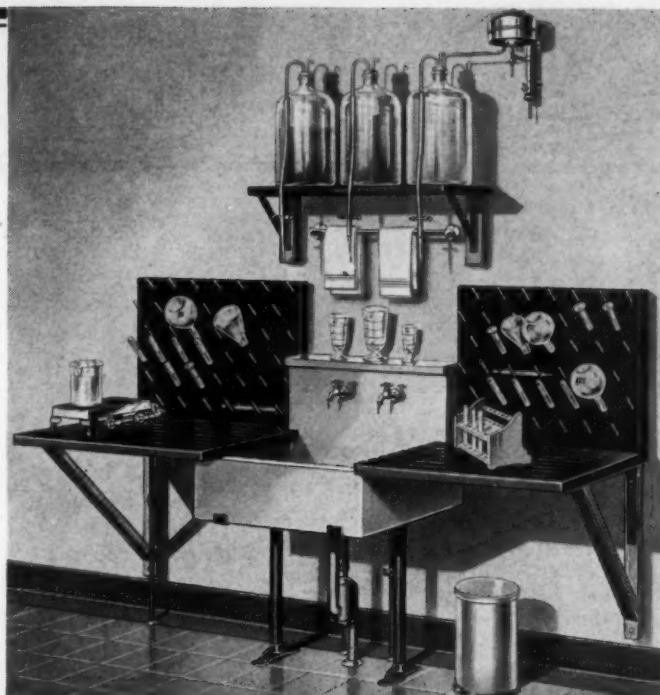
This particular assembly includes five standard catalog units—but does not include the laboratory apparatus shown in the illustration. For detailed description of the units, please refer to Section 7 of the Hamilton-Invincible Catalog which has just come off the press. If you have not received your copy, write for it today.

HAMILTON-INVINCIBLE, INC.

Sales and General Offices

Two Rivers, Wis.

AUTHORIZED REPRESENTATIVES IN PRINCIPAL CITIES



Type 1A-700 Sink Assembly, Consisting of 5 Standard Catalog Units.



HAMILTON-INVINCIBLE

LABORATORY VOCATIONAL AND LIBRARY FURNITURE

PROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

HYNSON, WESTCOTT & DUNNING, INC.

Baltimore, Maryland



After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

MERCUROCHROME, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

REGIONAL NEWS • • • • •

Eastern States

CONNECTICUT

East Windsor Hill.—The old chapel of Hartford Seminary is being incorporated into the plans for the South Windsor High School to be erected on the former site of the seminary. The chapel is to form the central structure with a new wing built on each side and an auditorium added at the rear. The library will be on the second floor of the former chapel and the principal's office and some classrooms on the first.

Hartford.—Its first parochial school is being planned for West Hartford by the Church of St. Thomas the Apostle.

MAINE

Waterville.—A subscription campaign, waged for funds for the construction of a wing at the senior high school has already raised \$20,000, enough for the erection of the building, and is being continued in order that funds for equipment may also be obtained. It is planned that no money shall be taken from tax funds for this addition other than that necessary for its maintenance after it is completed.

NEW JERSEY

Newark.—The Essex County vocational schools are about to offer a course in heating service for adults. It will be based upon industrial needs as outlined by a group of representatives from the heating field. At the present time classes will be offered in elementary and advanced instruction in the installation and service of oil-burning equipment and accessories. Courses in the installation and service of automatic stokers, ventilation and air conditioning will be added when the demand grows large enough.

NEW YORK

New York City.—Sixty-seven teaching positions were abolished and eighty-six classes were consolidated in February as a result of the decline in enrollment. The bureau of reference, research and statistics estimated that 10,000 fewer children would be enrolled in the elementary grades in February than were enrolled last October, and the cuts were ordered accordingly.

Port Byron.—Flames thought to have originated in the boiler room completely destroyed the Port Byron High School at a loss of between \$100,000 and \$200,000, part of which was covered by insurance. The three-story brick building, erected in 1899, had interiors constructed entirely of wood. Some time

ago Port Byron voted down a large bond issue for a new school.

PENNSYLVANIA

McKeesport.—A revised schedule of study for the high school has been drawn up by Supt. James H. Lawson to be "in keeping with the student's interest, ability and need." One feature of all courses, academic, commercial and industrial, is the class in citizenship training in the eleventh year. This course will include highway safety instruction and will attempt to instill respect for private and public property.

Wilkes-Barre.—A proposal recently introduced by the school board calls for the grouping of the 300 insurance policies held by the school district into four or five master policies. This would eliminate the need for dealing individually with all of the insurance firms involved. Should the proposal be accepted before the expiration of the policies, they can be canceled in favor of the new policies in like amounts with the same firms but grouped under four or five heads.

District of Columbia

The school appropriation bill at present carries a rider forbidding the teaching of communism, and this has been interpreted to mean that the subject must not be mentioned. In order to permit teachers here to give the facts about communism, Representative Fred J. Sisson has introduced a bill to that effect, of which he says: "Prohibition against teaching communism . . . could be based only upon the assumption that our young people are too feeble-minded to know the truth about things."

Southern States

ALABAMA

Bay Minette.—A survey of all the school children in Baldwin County is being conducted by Dr. Stephen A. Durick, county health officer, to determine the presence of hookworm. Children showing a positive report in the laboratory examinations of the state health department will be given treatment free of charge.

GEORGIA

Moultrie.—Whenever it rains there is considerable seepage into the high school furnace room, sometimes amounting to as much as one foot. Several times during the past winter the local fire company has had to pump out the room before the building could be heated. In an effort to control this problem, waterproofing contracts were recently let.

KENTUCKY

Lexington.—Summarizing the most important events of the past year, Henry H. Hill, superintendent of city schools, announced that the \$500,000 PWA building program has been completed; textbooks have been adopted for a five-year period; salary cuts have been restored and a new salary schedule for teachers has been inaugurated; the teachers' pension system has been revised to provide actuarial soundness; trade school courses in homemaking and cabinet making have been installed at the Dunbar Negro School, and a large portion of the school plant has been renovated and restored. . . . "Who's Who Among University-Trained Teachers," a bulletin published by the placement bureau of the University of Kentucky, is a collection of the photographs of the graduates and brief sketches giving an outline of their education and training for teaching. It is circulated among boards of education, superintendents and placement bureaus.

LOUISIANA

New Orleans.—Ground breaking ceremonies were held recently for the L. E. Rabouin Memorial Vocational School for Girls. The school, when completed, will have accommodations for the instruction of 1,000 girls in industrial work and is the result of a \$300,000 gift from the late L. E. Rabouin.

MISSISSIPPI

Carmichael.—A \$15,000 bond issue for a new school and gymnasium at Carmichael and an elementary school at Springs carried at a special election.

Jackson.—A program initiated by the Mississippi Education Association to raise \$1,000,000 for the common schools, later expanded to include agricultural high schools, junior colleges and senior colleges, was introduced into the legislature as a bill calling for \$1,000,000 for common schools; \$25,000 for agricultural schools; \$50,000 for public junior colleges, and \$50,000 for senior colleges. It was passed at an extraordinary session and signed the same day by the governor.

NORTH CAROLINA

Raleigh.—The state recently adopted and purchased new high school textbooks in five subjects, according to Clyde A. Erwin, state superintendent. These books, the third adoption since last fall, are rented to the pupils throughout the state. The rental price has been 69 per cent less than the price the children would have paid if they had purchased the books outright. Special North Carolina editions in English and French were bought by the state board of education after it had set up certain minimum requirements of manufacture.

HILLYARD'S SPECIAL GYM FINISH ★

NON-SLIPPERY . . . NO GLARE . . . SUPER-TOUGH . . . LONG WEARING . . . ECONOMICAL

Show Us The Floor
that has not been treated with Hillyard's Gym Finish and we will show you a floor we can improve.

FREE . . . A new book just off the press, "Hillyard's Manual on Proper Floor Maintenance", also our NEW 1936 catalog . . . "Modern Maintenance". Write for your copy today.

There is a Hillyard Maintenance Expert in your community . . . to help you solve your floor maintenance problems. Call or wire the Hillyard Chemical Co. for a Hillyard service man, consultation free.

A Hillyard expert will inspect your floors and give detailed estimates and recommendations without cost or obligation.



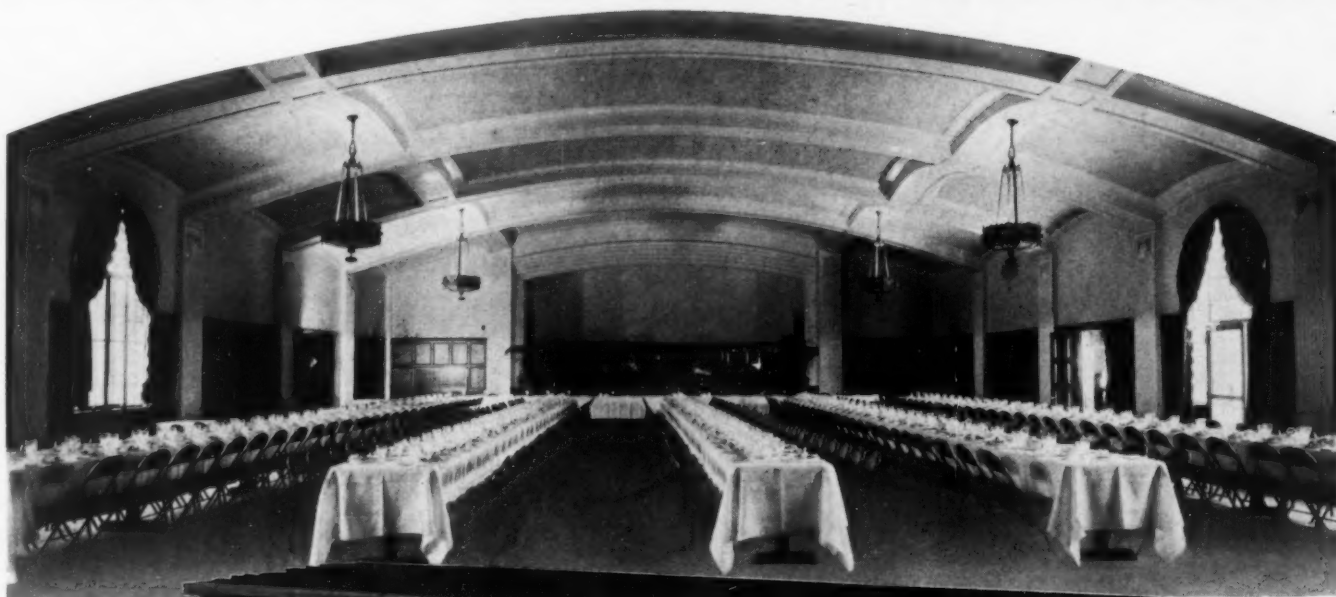
Like a piece of flexible crystal clear glass. Easily transformed into a dance floor with Hillyard's "Spangles". . . (Not a wax)

HILLYARD CHEMICAL COMPANY

BRANCHES IN
PRINCIPAL CITIES

ST. JOSEPH
MISSOURI

SHINE-ALL SALES CO.,
DISTRIBUTORS



53 Super-Service Tables Installed in Alumni Union Building, Ypsilanti, Michigan. Note the utilization of space and seating comfort.

Super-Service Tables

Locking Keel prevents top from sagging. No Braces or Hinges to keep in repair. Assembled without the use of tools. Knee Space furnishes Seating Comfort.

Send us your floor plan for suggestions and arrangement. You will find our service helpful.

GUNN FURNITURE COMPANY

Builders of Good Furniture Since 1889
GRAND RAPIDS, MICHIGAN

VIRGINIA

Richmond.—A child welfare committee is working to have localities or counties appropriate a total of \$250,000 or \$300,000, to be met with an equal amount by the state, to be used for tonsil and adenoid work among indigent children. It is estimated that the average cost of a tonsillectomy would be about \$10 and that about 75,000 children, members of indigent families in the state, need this work done.

Middle Western States

ILLINOIS

Chicago.—A new school and two additions to replace portable buildings now in use are scheduled for the north and northwest sides of the city as part of a \$2,000,000 citywide construction plan.

INDIANA

Jamestown.—A recent \$90,000 fire at the local school is thought to have originated in or near a ventilator fan. The interior of the original front section of the school was destroyed as were the upper floors of the two additions. Fireproof flooring in the south addition and a fireproof wall between this addition and the original building checked the fire and protected the first and second floor rooms. The gymnasium, which was almost untouched by the fire, will be used for classes as soon as it can be heated.

IOWA

Des Moines.—In 1917 the pupils at the Cattell Grade School saved their pennies and purchased a Liberty bond in the name of the school. The bond matured recently and the money has purchased a radio for the school.

Hardy.—A new consolidated school is being organized here with a district composed of thirty-eight and one-half sections to serve about 200 children. A new board was elected and a bond issue to provide funds for a new school building voted upon.

Rockwell City.—A drive to get parents to visit the school netted a visiting list of fifty parents in one week, as many as visited the school during the whole of last year.

Whiting.—A night school and public forum are being held in the school auditorium under the direction of C. H. Munson, superintendent. The attendance at these meetings averages more than 100 an evening; farm questions are discussed.

KANSAS

Chapman.—The enrollment of the Dickinson County Community High School has increased from 250 to 375 in a two-year period, principally as the result of a bus system which enables the pupils to go home at night. The pupils come from a radius of forty

miles to attend the high school. The eleven busses will travel a total of 125,000 miles during the school year, it is estimated.

Garnett.—The school here refused to issue a report card to a pupil on the ground that his tuition had not been paid. The case went to court where the judge held that the parents, who had moved from the district because of a foreclosure but who ran a business there though they resided outside the district with relatives, could not be charged tuition. Because of the intention of the parents to return to Garnett, the court ruled that "residence is a matter of intention in the case."

Mound City.—The Linn County Better School Week attracted 2,200 persons to twenty-two meetings.

MICHIGAN

Detroit.—The board of education announces that all of the city's 270,000 public school children will receive additional training in traffic safety and safe driving. Adequate knowledge of state and local traffic ordinances was made a requirement for graduation in the high schools beginning last month, thus making Detroit a pioneer in this phase of safety education.

Kalamazoo.—The orthopedic, hard of hearing and fresh air departments of the school system are to be housed in a three-story addition now being planned for the Harding School.

MINNESOTA

Minneapolis.—An adult education building is being constructed at the University of Minnesota, a result of several years' work by educationists. They several years ago conceived the idea of providing a place where professional people could "brush up" on the latest developments in their fields.

NEBRASKA

Franklin.—The sixty pupils who carry their lunch to the school have noon activities planned for them during the lunch hour by committees organized from their own group. Motion pictures are shown twice a week, and indoor horseshoes, table tennis, dominoes and card games are played under the supervision of the teacher in charge. A radio and current magazines are available.

OHIO

Cleveland.—Small sized diplomas are being given to graduates of the public schools this year instead of the old large sized scrolls. The new certificates carry the grades of the pupil.

Columbus.—Eight hundred one-room schoolhouses have been abolished throughout the state during the last two years at a state and county saving of \$40,000, according to E. N. Dietrich, assistant director of education.

Western States

ARIZONA

Tucson.—A campaign has been launched to raise funds for the construction of two Catholic high schools, one to be located here and one in Phoenix. The Augustinian Fathers will be in charge of the schools.

CALIFORNIA

Monrovia.—The cooking and home economics classes at the Monrovia-Arcadia-Duarte High School give breakfasts and luncheon parties as part of their course. Recently the girls' cooking class served the graduating boys a farewell banquet and the following day the boys' cooking class entertained the girl graduates.

Sacramento.—Two hundred and ninety-four school districts during the past year applied for permission to exceed the 5 per cent limitation on annual expenditure increases. The state board of equalization gave permission in 282 cases, in 269 of which approval was for the full amount requested. The majority of the applications were for increases involved in the reconstruction and remodeling of school buildings.

San Diego.—Six northern county elementary school districts have broken away from the Oceanside Carlsbad Union High School district to form a high school district of their own to be called the San Dieguito district.

COLORADO

Denver.—Through the cooperation of Janet Smith, state director of nursery education of Colorado, the WPA and the University of Denver, a nursery school is being started on the University of Denver campus. The university is furnishing the rooms, heat, light and cooking facilities, and the WPA, the food, janitor service and two trained leaders. The school will serve as an observation center for the university.

OREGON

Portland.—J. F. Cramer, superintendent of schools of The Dalles related first-hand experiences of his visit to the Australian school system at a meeting of the Oregon-Washington Schoolmasters' Club held in Portland, February 8. This club holds monthly meetings throughout the year. James T. Hamilton of Reed College is president.

UTAH

Salt Lake City.—The department of public instruction, of which Charles H. Skidmore is superintendent, recently issued bound copies of the "State Superintendent's Items for District School Superintendents." These items are published throughout the year, in mimeographed form, and while they follow the items for the year 1934 in consecutive paging, are indexed separately.

**We've Made a
NEW
MICROSCOPE
for This Boy ...**

He Is Your Student



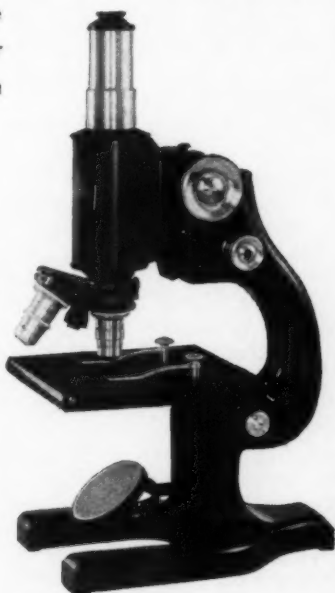
HEAVIER and more durable—for rough handling; simple and precise in adjustments—for an amateur microscopist's operation;—that's the new Spencer No. 63 Microscope for school laboratories.


This No. 63 Microscope has three features that recommend it for student use. (1) A larger stage, 125mm. square, and (2) Greater distance from arm to the optical axis 105mm.—make it easier for the student to adjust his slide for observation. (3) The objective cannot be racked down through the slide.

Students often find it difficult to locate a particular object when the working distance is limited and the field observed small. The objectives, being parfocalized, the student can use the lower power objectives as a finder.

No. 63 Microscope

For complete details on this No. 63 and other student microscopes, write for Folder M-70. Please address Dept. P-3.



Spencer Lens Company
Buffalo  New York

**OUR DETECTIVES SHOWED
US THAT FENCE PROTECTION
WOULD PAY FOR ITSELF IN
TWO YEARS ...**



"They counted up the costs of pilferage, petty vandalism, fire, burglary, public liability, and other risks—some affecting premiums, many not insurable. They showed us in black and white that our savings would pay in two years for a long-lived Continental fence."
Special-analysis copper-bearing steel—wire heat-treated for tensile strength and resilience—heavy coating of hot-dipped zinc—and many other modern features make Continental Chain-Link fence serve better and last longer.

14
**MODERN AND
DISTINCTIVE**
features

CONTINENTAL Chain-Link FENCE

MAIL THIS COUPON...TODAY

★ TR. MRK. REG. U. S. PAT. OFF.
CONTINENTAL STEEL CORP., Kokomo, Indiana.
(Plants at Canton, Kokomo, Indianapolis)

Find out *now* how little this modern, many-sided protection will cost you—how much it will earn.

Name.....

Address.....

Visual Education Control Experiment at Lakefield

In an effort to determine just how much time, money and effort should be expended on the development of a visual education program, the Lakefield, Minn., schools conducted an experiment in selected classes and subjects. Groups were established on a basis of mental age and sex, and pupils whose mental age was considerably above or below the class average were eliminated from the experiment.

Without having seen the film to be shown, the instructor prepared a test based on the Minnesota course of study dealing with the subject covered. Each class was divided into groups, one given the test before seeing the film and the other after. The groups were reversed during the second semester to eliminate teacher error in pairing, testing or interpretation of mental age rating.

Twenty-nine tests were administered to classes when all pupils were present and the groups that saw the film before taking the curriculum test showed an average improvement over the others of 14 per cent in general science I, II, III; of 18 per cent in biology; 15 per cent in agriculture I, II, III; 12 per cent in geography IV, VI and VII, and 9 per cent in language IV and literature VIII and XI.

Install Sound Film Systems

Talking picture programs have been initiated into the school systems at New Haven, Conn., Tarrytown, N. Y., and Allentown, Pa., by their boards of education, while in Newark, N. J., A. G. Balcom, director of visual education, is working to revise the curriculum of the schools to include the use of sound films. The public school system at Port Chester, N. Y., recently purchased additional sound film and equipment.

Safety Education Through Films

A member of the California Highway Patrol, delegated to safety work in the schools of his county, recently wrote to *Camera Craft* of his success in interesting the children in safety through the use of films. He "arranged with the schools for honor children in safety to be appointed to act out parts on the highways and let the children act parts in realistic accidents showing the right and wrong actions. These shots were so realistic that teachers were fooled. Needless to say the children in the 100 odd schools in the county can hardly wait for the next visit of the officer with the pictures and are so well versed

in the laws and rules that the county won first place among the fifty-eight other counties of the state for its safety work as judged by the P.-T. A."

How to Judge Motion Pictures

The 1936 edition of "How to Judge Motion Pictures," a pamphlet written by Sarah McLean Mullen and published by *Scholastic*, is now ready for distribution. It has been prepared especially for the use of high school pupils and contains, among other things, a score card for the rating of pictures and information on the establishment of a high school photoplay club.

Source Directory of 16-mm. Films

After a lapse of two years, the fifth revised edition of the Victor Directory of 16-mm. Film Sources is now ready for distribution. This handbook lists all known sources of 16-mm. silent and sound films, save those withholding permission for listing. The directory is free and distributed by the Victor Animatograph Corporation, Davenport, Iowa. This edition is a completely new work from the point of both editorial content and source listing.

Copies of Books Filmed for Group Student Use

An experiment in making film copies of books, manuscripts and rare items for the John Hay Library at Brown University, first attempted last year, was so successful that it is being continued and expanded.

A copy of a reserved book, in great demand by the students, was photographed with a miniature camera on 35-mm. film. The library then flashed a reel of film pages on a screen in consecutive order and groups of students read the text simultaneously. The projector was operated by electricity and each photographed page was changed automatically at intervals.

Lantern Slides on Physics

A set of lantern slides on physics has been organized into thirty-four units of twelve slides each by Harry N. Wheaton, Cleveland, author of the set, for the Keystone View Company. The names of some of these units are Pressure in Liquids, Pressure in Air, Molecular Forces and Motions, Work and Mechanical Energy, Nature and Transmission of Sound, Image Formation, Magnetism and Static Electricity.

Films for the School Screen

VII—Italy

Along the Riviera—Handsomes villas and Roman ruins along the coast at the foot of the Italian Alps. 1 reel. 16 mm. and 35 mm., silent. For rent or purchase. Society for Visual Education, Inc., 327 South LaSalle Street, Chicago.

Cathedral Towns of Italy—Contrasts in church structures of Florence, Milan and Pisa. 1 reel. 16 mm., silent. For rent or purchase. Mogull Brothers, 1944 Boston Road, New York City.

Ruins of Pompeii—Tour of excavations. ¼ reel. 16 mm., silent. For rent or purchase. Hollywood Film Enterprises, Inc., 6060 Sunset Boulevard, Hollywood, Calif., or National Motion Picture Company, Mooresville, Ind.

Rome, the Eternal City—Historic associations of famous buildings and world renowned architectural treasures. 1 reel. 16 mm. and 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston, Mass.

Venice—Scenic picture of the city of islands. 1 reel. 16 mm. and 35 mm., silent. For rent or purchase. Society for Visual Education, Inc., 327 South LaSalle Street, Chicago.

Vesuvius—Airplane views looking down into crater. ¼ reel. 16 mm., silent. For rent or purchase. Hollywood Film Enterprises, Inc., 6060 Sunset Boulevard, Hollywood, Calif., or Mogull Brothers, 1944 Boston Road, New York City, or National Motion Picture Company, Mooresville, Ind.

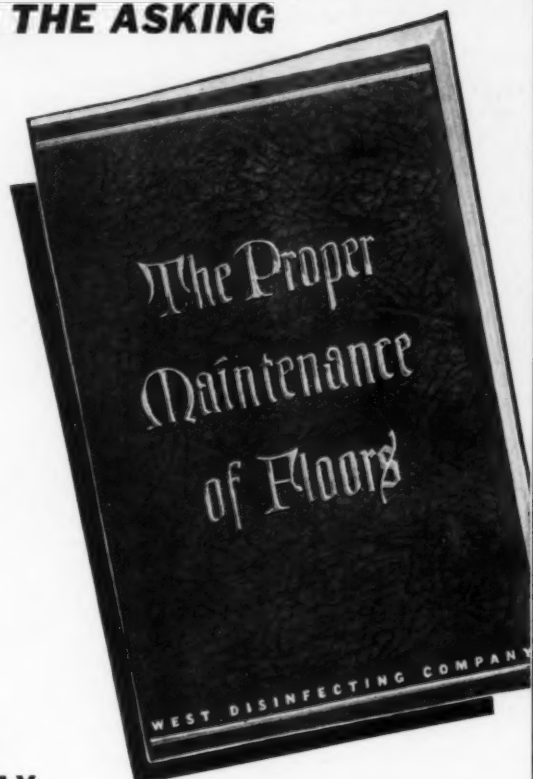
When Naples Sings—Italian musical with English titles. 7 reels. 16 mm. and 35 mm., sound. For rent or purchase. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City (16 mm.) and Ideal Pictures Corporation, 30 East Eighth Street, Chicago.

Venetian Holiday, When in Rome, and Down From Vesuvius—Three films of 1 reel, 2 reels and 2 reels. 35 mm., sound. Music and singing only. Captions are in English. Transportation charges and insurance only. Ask for safety stock. Italian Tourist Information Office, 626 Fifth Avenue, New York City.

Isola Di Capri and Pompeii and Herculaneum—Two films of 1 reel each. Italian travelogue with French dialogue. 35 mm., sound. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City.

FREE!

FOR THE ASKING



AND
IT MAY
SAVE YOU HUNDREDS OF DOLLARS
IN FLOOR MAINTENANCE COSTS

*The following types of floors
are included in this booklet:*

UNPAINTED WOOD	PAINTED OR VARNISHED SURFACE
LINOLEUM	TERRAZZO
CEMENT, CONCRETE OR CORK	MARBLE
RUBBER TILE OR RUBBEROID	FAIENCE TILE
SOFT ASPHALT COMPOSITION OR SOFT MASTIC TILE	SLATE OR QUARRY
MAGNESITE OR HARD MASTIC	GARAGE FLOORS
	WASHROOM FLOORS
	CELLAR FLOORS
	GYMNASIUM, ARMORY OR DANCE FLOORS



WEST DISINFECTING COMPANY

DEPT. C, 42-16 BARN STREET, LONG ISLAND CITY, NEW YORK
Branches in 55 Principal Cities
LARGEST ORGANIZATION OF ITS KIND IN THE WORLD



A *Strong* DESK with AN EASY, POSITIVE ADJUSTMENT

This Eclipse desk enables you to correctly and comfortably seat every child in the classroom. It has a simple, wide range adjustment which operates easily and holds positively. Note the broad bearing surfaces and the design of the supports which distribute strain and assure rigidity. The seat is of the swivel type . . . has a shaped saddle which affords hygienic posture. Of course, there are many other advantages in using the Heywood-Wakefield Eclipse Adjustable Desk. *We shall be pleased to give you complete and detailed information on this or any other H-W Desk, without cost or obligation.*

HEYWOOD-WAKEFIELD

MAKERS OF PRACTICAL SCHOOL SEATING
174 PORTLAND ST., BOSTON, MASS.

Sales Offices in 27 Principal Cities

School System Surveys Radio Program Listeners

The radio has been used as a public relations medium by the schools of Rockford, Ill., for two and a half years, during which time seventy-six weekly programs, portraying actual school situations, have been produced with 2,300 pupils taking part.

A survey of the city, to determine the number of listeners the program had, was undertaken by the pupils in a salesmanship class under the direction of G. Henry Richert. Personal interviews were held with 444 adults from radio-owning homes in all sections of the city. Of these, 282 had children attending school.

One hundred and sixty questioned said that they listened to the program, a total of 36 per cent. With figures based on the 1930 federal census, which showed 17,836 homes with radios and using the arbitrary proportion of four listeners to each radio, it was estimated that the program had 6,240 radios, 36 per cent of the total, with 25,680 listeners, not all of whom listened regularly. When those interviewed were asked whether they preferred the broadcasts at a particular time of day, 91 chose morning, 103 afternoon and 250 preferred night broadcasts.

Kentucky Announces New Radio Listening Centers

Twenty-two radio listening centers have been established in the Kentucky mountains by the University of Kentucky. The first of these centers was inaugurated by the university several years ago to bring the cultural and educational advantages offered by radio to persons living in remote areas. The radios are usually placed in stores, schools, community centers or even private residences in charge of a person of prominence and vision in that particular region.

The radio sets for these centers are donated by organizations or citizens interested in giving these remote settlements contact with the outside world.

Schools Invited to Broadcast

Forty-nine high schools in the listening area of station WOSU, Ohio State University's radio station, have been invited to broadcast forty-five-minute programs during the coming weeks. The broadcasts are planned to give talented pupils an opportunity to work with a microphone. A cup will be presented to the school presenting the best program.

On the Air During March

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Standard except when otherwise specified.

Monday

American Education Forum—2:00-2:30 p.m. (NBC-WEAF).
History Series—2:30-3:00 p.m. (CBS).
March 2—Washington.
March 9—Cleveland.
March 16—Minneapolis.
March 23—Portland (Ore.).
March 30—Salt Lake City.
Education in the News, Office of Education—7:30-7:45 p.m. (NBC-WEAF).

Tuesday

Your Child, Dr. Ella Oppenheimer, Children's Bureau, U. S. Department of Labor—11:15-11:30 a.m. (NBC-WEAF).
Treasure Trails in Art Series—2:30-3:00 p.m. (CBS).
March 10—The Master of Light and Shadow: Rembrandt of Holland.
March 24—Master Armorers and Their Art.
Literature Series—2:30-3:00 p.m. (CBS).
March 3—A Poet of the Latin Peoples—Victor Hugo.
March 17—Peter Goldthwaite's Treasures (Intermediate).
March 31—An American Poet—Edgar Allan Poe.
Science Service Series—4:30-4:45 p.m. (CBS).
Understanding Opera—6:35-7:00 (CBS).
Medical Emergencies and How They Are Met, dramatized program with incidental music, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).
March 3—Cancer, Dr. W. W. Bauer.
March 10—Hard of Hearing, Dr. Morris Fishbein.
March 17—Eyesight Saving, Dr. W. W. Bauer.
March 24—Hay Fever and Asthma, Dr. Morris Fishbein.
March 31—Let Your Doctor Decide, Dr. W. W. Bauer.

You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).
March 10—Powers of the National Government, Walter F. Dodd, professor of law, Yale University.
March 17—Administrative Lawmaking, O. R. McGuire, chairman, American Bar Association's Committee on Administrative Law.
March 24—The Constitution and the New Deal, Donald Richberg, former administrator, NRA.
March 31—The Spirit of the Constitution, William Hard, publicist.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).
March 4—Learning Through the Library, Carl H. Milan, secretary, American Library Association.
March 11—Preparation for Home and Family Life, Lita Bane, collaborator in parent education, U. S. Department of Agriculture.
March 18—The Continued Education of Adults, Morse Cartwright, director, American Association for Adult Education.

March 25—Alcohol and Modern Life, William McAndrew.
Geography Series—2:30-3:00 p.m. (CBS).
March 4—The Pueblo Indians Today.
March 11—The Loss of the Soil.
March 18—The Tennessee Valley.
March 25—New York and Its Water Supply.

Youth Today, auspices of the National Student Federation—4:00-4:15 (CBS).
Our American Schools, directed by Belmont Farley—7:45-8:00 p.m. (NBC-WEAF).
The Cavalcade of America, dramatization of significant moments in American History—8:00-8:30 p.m. (CBS-WABC).

Thursday

Music and Elementary Science Series—2:30-3:00 p.m. (CBS).
March 5—The Pueblo Indians (Intermediate), and The First People.
March 12—The French Minstrel and the Spanish Cobbler (Primary), and The Ice Sheet That Was Seven Times Higher Than the Empire State Building.
March 19—Music in the Appalachians (Intermediate), and Before the Beginning of History.
March 26—March Winds (Primary) and Taming the Wilderness.
Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).
America's Town Meetings—9:30 (NBC-WJZ).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C—11:00-12 m. Series B and D—11:30 a.m.-12:20 p.m. (NBC-WEAF, WJZ).
Vocational Guidance and Current Events Series—2:30-3:00 p.m. (CBS).
March 6—Getting a Job.
March 13—Personality as a Factor in Occupational Success.
March 20—Growing on the Job.
March 27—When You Do What You Choose: When Work Runs Into Play.
Magic of Speech—2:00-3:00 p.m. (NBC-WEAF).

Saturday

Our American Schools, directed by Florence Hale—11:00-11:15 a.m. (NBC-WEAF).
Cincinnati Conservatory of Music—11-12 a.m. (CBS).
Metropolitan Opera—1:55 (NBC-WEAF).
Your English—3:00-3:15 (NBC-WJZ).
Boston Symphony Orchestra—8:15-9:10 p.m. (NBC-WJZ).

Sunday

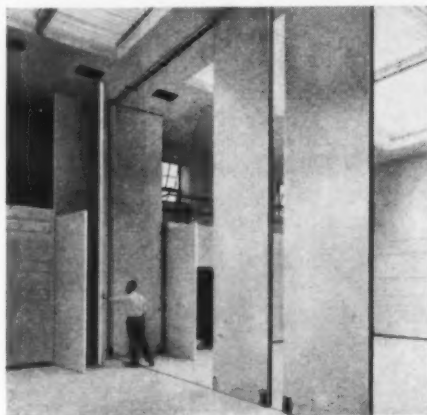
University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).
Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m. (CBS).
Philharmonic Society of New York, Arturo Toscanini, director—3:00-5:00 p.m. (CBS).
Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).
General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

a.c.f.

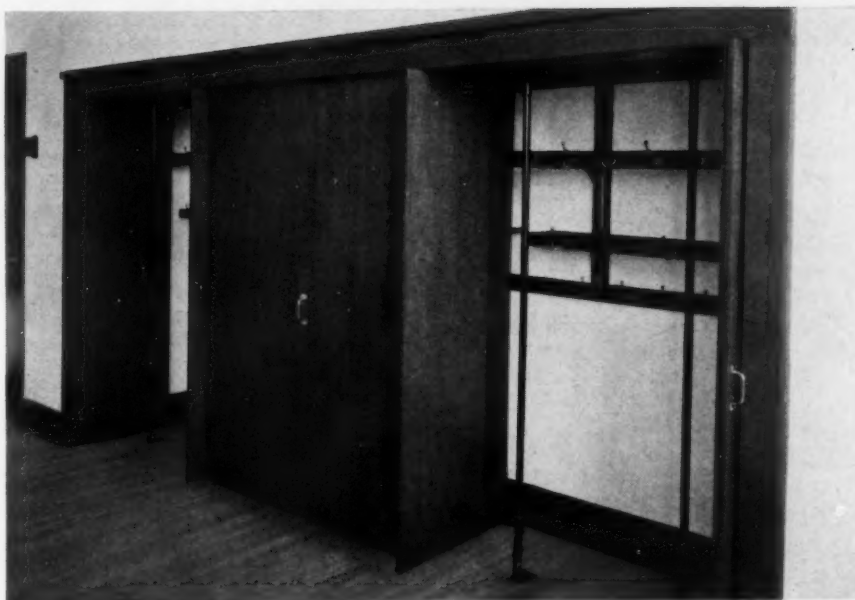
FAIRHURST SCHOOL WARDROBES

AND FOLDING WALLS

Gymnasium, Yale University. Architect, John Russell Pope.

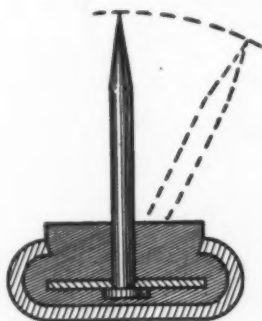
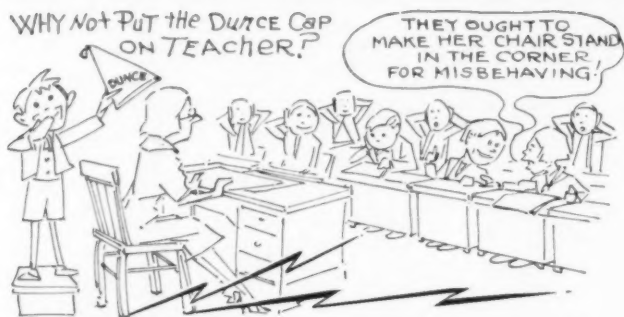


Also A.C.F. Fairhurst folding walls. Lock rigidly into place. May be furnished with blackboards and continuous chalk rail



Fairhurst Wardrobes care for more pupils than do other wardrobes of equal dimensions. All parts subject to stress are amply rugged. In the open position the doors are entirely out of the way at the ends of each compartment. The doors pivot, there are no rollers or wheels, no track or slots on the floor. The operation is simple, smooth, and quiet. The interior arrangement remains unchanged, and aisles and interiors are free from obstructions whether the doors are opened or closed. Sagging of floors does not prevent operation of doors in any way. All wardrobes furnished complete in wood or metal, including hooks and hangers.

AMERICAN CAR AND FOUNDRY COMPANY
30 CHURCH ST., NEW YORK, N. Y. • PHONE CORTLANDT 7-8100



Dotted lines indicate degree to which chair may be tilted while glide remains flat on floor. The rubber cushion absorbs all noise, and washer prevents nail from pulling out.

Do your pupils look up from their studies every time you move your chair? Is the noise in your schoolroom preventing good grades? If so, it is time to equip all chairs and movable furniture with

DARNELL Noiseless GLIDES

Your recommendation to install Darnell Noiseless Glides will result in floor protection, the prevention of wracked furniture, and a greater class efficiency.

Write for FREE Sample Set

DARNELL CORPORATION, LTD.

Station B, Box 4027-N, Long Beach, Calif.; 36 N. Clinton St., Dept. G, Chicago, Ill.

wherever there is a stage

Vallen No. 150 Noiseless All-Steel Ball-Bearing Tracks are in use in theatres, schools, colleges and churches from Iceland to Java and from east to west, the world round.

This world wide acceptance has been gained through years of trouble-free service.

*This way
you take no chances*

There are Vallen Noiseless Electric Curtain Controls and Tracks for every size stage. Any VALLEN installation will give better service for the money than any similar or make-shift equipment. A VALLEN installation is always the best and the least expensive.

Write for information

VALLEN, INC.
AKRON, OHIO

NAMES IN THE NEWS • • •

Eastern States

MARION K. MCKAY, professor of economics at the University of Pittsburgh, has been appointed financial advisor of the state department of public instruction of Pennsylvania.

FRANKLIN A. BUTTS, Poughkeepsie, was elected president of the New York State Association of Elementary Principals.

W. C. MCGINNIS, superintendent of schools at Perth Amboy, N. J., has been appointed assistant state director in charge of educational programs of the WPA. The board of education of Perth Amboy has granted him a leave.

JOHN R. STICKNEY, superintendent of schools of the secondary supervisory district of Warren County, is the new president of the New York State Association of District Superintendents.

DR. CHARLES CARROLL, supervisor of public education in Rhode Island, died in Providence following an operation. Doctor Carroll was state director of vocational education from 1918 until the reorganization of the state government last year and was retained in the new department of education as chief of the division of promotion and supervision of public education.

WILLARD W. BEATTY, superintendent of the Bronxville Public Schools, Bronxville, N. Y., since 1926, resigned his post to become director of Indian education in the Indian affairs department of the Department of the Interior. HOWARD V. FUNK, principal of the Bronxville Junior High School, will serve as acting superintendent for the remainder of the school year.

ELMER E. ARNOLD, at one time superintendent of schools in Pelham, N. Y., and co-author of Durell and Arnold's textbooks, died in Schenectady, N. Y., at the age of sixty-three. Ill health caused Mr. Arnold's retirement three years ago from his post with the Schenectady department of public education.

Middle Western States

DR. W. T. BAWDEN, formerly managing editor of the *Industrial Education Magazine*, has been made head of the industrial education department of the Kansas State Teachers College, Pittsburgh. Doctor Bawden at one time was an associate superintendent of schools at Tulsa, Okla., and a specialist in the Office of Education, Washington, D. C.

CHARLES M. HIMEL has retired after

twenty-one years as principal of Maine Township High School, Park Ridge and Des Plaines, Ill. He has been fifty-one years in school work. The high school now has a million-dollar building on a fifty-eight-acre campus.

DR. MINNIE MILLER, head of the modern language department at Emporia Teachers College, has been awarded the Palmes Academiques, a decoration from the French government, for the "propagation of French in the United States."

ERNEST T. CAMERON, executive secretary of the Michigan Education Association for thirteen years, is now business representative of the association and DR. A. J. PHILLIPS, deputy executive secretary, is acting executive secretary.

WILLIAM B. ITTNER, prominent school architect with headquarters in St. Louis, died after an illness of six months. Mr. Ittner was responsible for 430 school buildings in 105 cities and twenty-eight states.

DR. HARL R. DOUGLASS, professor of secondary education at the University of Minnesota, is on leave of absence to serve the American Youth Commission of the American Council on Education.

Western States

DR. GEORGE FINLAY SIMMONS, elected the seventh president of Montana State University, began his duties in January, relieving PROF. F. E. SCHEUCH, who has served five terms as acting president.

DR. CLARENCE VALENTINE BOYER became the sixth president of the University of Oregon on February 6. Doctor Boyer has been head of the English department of the university since 1926.

DR. HOMER L. SHANTZ, president of the University of Arizona, has announced his resignation to become effective June 1. He has accepted the position of chief of the division of wild life management of the forest service of the U. S. Department of Agriculture.

MAX MORTON, principal of the Thatcher School, Pueblo, Colo., has been elected president of the Colorado Education Association.

ROBERT O. EVANS, superintendent of schools at Helena, Mont., and an official of the Montana Education Association, tendered his resignation to the school board of Helena recently.

VIERLING KERSEY, superintendent of public instruction of California, was re-elected president of the National Council

of State Superintendents of Public Instruction and Commissioners of Education at the annual meeting.

THE VERY REV. THOMAS F. LEVAN, president of De Paul University Chicago, from 1920 to 1930, died suddenly in Los Angeles. Father Levan, a noted Catholic educator, was head of Los Angeles College at the time of his death.

R. A. FRANKLIN, superintendent of schools at Kerrville, Tex., for fifteen years, resigned on February 1 to accept a position with a publishing house. His headquarters will be in Dallas.

Southern States

MARIE WHITE, who has been doing educational work with the TVA since the inauguration of that program, has been made regional agent for home economics in the southern region by the federal board. Miss White succeeds RUA VAN HORN, who was transferred to the central region.

THOMAS J. FENDER, twenty-seven years old, has been elected president of the board of education of Richmond County, Ga. It is thought that Mr. Fender is the youngest man in the South to be president of a board as large as this, for Richmond's annual budget is about \$750,000 and between 500 and 600 teachers are employed.

FRANK R. RICHARDSON, superintendent of schools at Wadesboro, N. C., resigned on January 31 to become Virginia and West Virginia representative for Bobbs Merrill Book Company.

JACK SULLIVAN, superintendent of education of Copiah County and president of the Mississippi Education Association, has resigned from the first office in order to enter another field. He will remain president of the association until the annual convention in April.

MRS. HORACE A. JOHNSTON, principal of the Lebanon High School, Lebanon, Ky., has been appointed superintendent of schools at Lebanon to complete the current term, an appointment necessitated through the death of Supt. J. R. STERRETT.

M. M. SHIRLEY, Forest, Miss., has been appointed by the governor of the state to act as superintendent of schools of Scott County to fill the vacancy caused by the death of W. H. FOSTER. Mr. Shirley will serve as superintendent until a special election is ordered by the governor.

T. N. TOUCHSTONE, whose appointment as superintendent of schools of Hinds County, Mississippi, was announced last month, has notified the board of education of his resignation from that position because of opposition by the county's incoming elective superintendent of education.



All
Shaft
Driven

Straight
Sound
Aperture

Direct
Beam of
Light on
Sound
Track and
Photo Cell

Hold Back
Sprocket

Filtered
Sound
Sprocket

Professional Quality

Ask any professional operator why these HOLMES 16 mm features are so necessary to the finest sound reproduction and picture projection.

Write for full descriptive literature.

No Bolts
No Chains

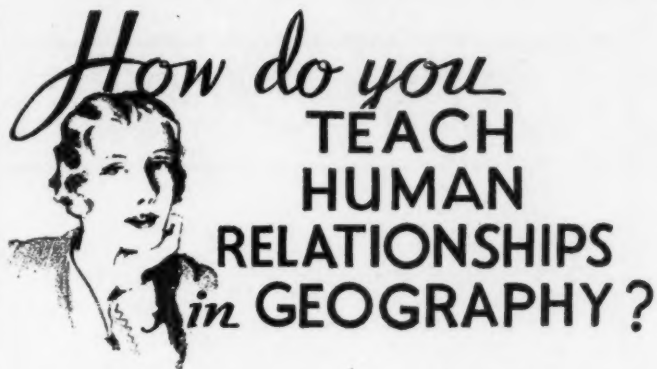
No
Sound
Drum

No
Reflected
Light From
Sound
Track to
Photo Cell

No Claw
Movement

No High
Speed
Shafts

HOLMES PROJECTOR COMPANY
1814 Orchard Street Chicago, Illinois



Progressive teachers have found the answer to this by supplementing their textbook teaching with

Weber Costello

**SEMI-CONTOUR POLITICAL-PHYSICAL MAPS
and the 16-inch
DUO-GRAPHIC POLITICAL-PHYSICAL GLOBE**

This dual geography teaching equipment shows pupils clearly, quickly, and easily how man's activities in a particular environment are influenced and controlled by a combination of physical, social, political and industrial forces. Thus problem solving is simplified, teaching made easier, more successful.

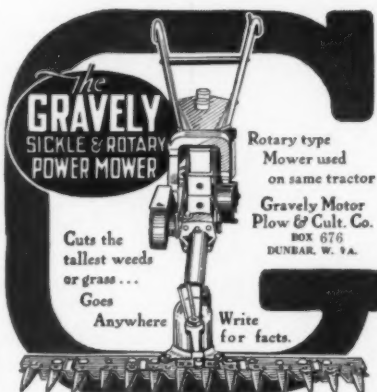
Write for FREE

"GEOGRAPHY TEACHING AIDS"

Address Dept. MG321

WEBER COSTELLO CO.
PUBLISHERS - - - CHICAGO, ILLINOIS, U.S.A.

APPEARANCES ARE HIGHLY IMPORTANT



Cuts the
tallest weeds
or grass...
Goes
Anywhere

Rotary type
Mower used
on same tractor
Gravely Motor
Plow & Cult. Co.
BOX 676
DUNBAR, W. VA.

With the Gravely
Mower you cut
everything. No
tall weeds left
standing to give
that ragged
effect.

With the Swivel
Action Cutter Bar

in front of the Single Wheel machine, you can mow the steepest hillsides or terraces or go into any corner. Quickly changed into a Rotary Mower pleasingly different from anything on the market. . . . Reduces your mowing costs. Does a better job. Write today for Free Booklet.

**Gravely Motor Plow
& Cultivator Co.**

Box 676, DUNBAR - - W. Va.

ATLAS BALL BEARING WOOD WORKING LATHE



**BUILT ESPECIALLY
FOR THE SCHOOL SHOP**

No effort or expense has been spared to make this the best speed lathe that can be built. Has 10" swing, 36" between centers. Deep groove S. K. F. Bearings. Heavy duty tailstock and self ejecting center. Wide range of speeds up to 4000 R. P. M. 60 hole indexing mechanism. Headstock also designed for out board turning.

Bench and floor models are available—all built to stand the wear of expert student use. Write today for catalog of Metal and Wood Lathes, Drill Presses, Tools, and Shop Equipment.

ATLAS PRESS CO.

372 N. PITCHER ST.,
KALAMAZOO, MICH.

COMPLETE DISPLAYS AT
Chicago—35 E. Wacker Dr.
New York—130 W. 42nd St.
Philadelphia—113 N. 3rd St.

ATLAS QUALITY
Shop Equipment Since 1911

NOTES FOR BUYERS . . .

Vogue

Men's fashions are just too exciting, aren't they? We've been doing the school shops, and there the latest rave is the new V-belt. Every high school boy is demanding a V-belt drive, if you please—for extra power. Doesn't it sound like *Physical Culture* magazine?

This fashion trend had us puzzled, so we made inquiry of the young man in charge of a shop that the high school boys frequent. He laughed and said he, too, favored a V-belt drive for the school. He explained that on the 1936 model "Workshop" precision lathe the V-belt drive is optional in place of the standard flat-belt drive. With the V-belt the boys can get an abundance of extra power to work with the toughest and heaviest of metals.

So now you know all we know. If you want your boys to keep up with the better-shop ideas, ask your manual training inspector for particulars. Or, better, write the Technical Service Department, South Bend Lathe Works, South Bend, Ind.

Everyotherman

Every other white man on the broad face of the globe is a cripple—when it comes to vision. The schools have helped maim him.

Observe the school child bent over his book, one day beset by glare from improperly shaded windows, the next day plunged into gloom from inadequate lighting, natural or artificial.

Headaches, nervousness, indigestion, irritability, poor vision and at last impaired eyesight—that's Everyotherman's history. If the schools are to stop graduating these cripples, more heed will have to be paid to illumination. The Edwin F. Guth Company, St. Louis, has been studying illumination for thirty-three years and occupies a commanding position in the indirect lighting field. Why not let one of this company's engineers suggest ways for your school to stop disabling young eyes!

Problem Floors

Take mummies or take floors, whichever you prefer. If you want them to remain immune from the ravages Of Time and the River, you give them a protective coating.

The Egyptians had a way with them

when it came to mummies. They took a spiced and swathed body and fitted it closely into a shaped case, modeling up the features on the case and scattering ritualistic emblems about over the body. Melting gums in oil, they applied the mixture to the case, shutting out all air and giving it a fine luster.

Modern chemists have a way with them when it comes to floors. One of them concocted a product which we know as bakelite. This, when dissolved in tung oil, makes a floor coating that is chemically resistant; it simply cannot be washed away. Moreover, it has luster lovelier than a mummy case; it has resiliency and an amazing list of good qualities, all of which the Midland Chemical Laboratories, Inc., Dubuque, Iowa, will be charmed to tell you about in case your school has problem floors.

Youth Eternal

We have found the fountain of eternal youth for you, Ponce de León. And you don't drink from it, you wash in it.

There was a similar long, long trek after a Blue Bird. At long last it turned up—you remember where. Now where, indeed, would eternal youth reside except in our schools? If not there, well, it's Good-bye, Mr. Chips.

In Milwaukee they are turning out fountains for eternal youth on a large scale. What is built to serve youth eternal has to be sturdy, so the Bradley Washfountain Co. is making its washfountains of enameled pressed iron. The bowls are solid one-piece pressings. The company's latest fountain for youth is semicircular. There is also a new circular fountain somewhat smaller than the original product. The address, my dear Ponce de León, is 2203 Michigan Street, Milwaukee.

Bruiseproof

Are your pupils such speedsters that they bump into every sharp corner and projection in the building? We were that kind of a child. In our bath a determined parent was always scouring at a turbid area which our ensuing howls proclaimed as another new bruise.

Modern design, with its rounded corners, with a trim that flows smoothly along the contours, makes head-on and rear-end collisions less painful. This quality of design is what gives the smart

appearance to the unit ventilators made by B. F. Sturtevant Company, Boston.

Appearance is only one small factor in choice of ventilating equipment, of course. A unit ventilator has the virtue of allowing individual rooms to be heated and ventilated while other rooms are unoccupied. Each Sturtevant unit, if you please, can be adjusted so that all outside air, part outside and part recirculated air, or all recirculating air may be used, thus meeting any operating conditions that local laws require.

Golden Wedding

It's golden wedding day down around Cincinnati. They are celebrating fifty happy years of wedlock between Field and Fence. Secure through the years, this union has been linked by chains of truest steel.

Schools are taking an interest in this fiftieth anniversary because along with it the Stewart Iron Works Company has announced a development especially designed for athletic fields and grounds where a barbed wire overhang is something of a necessity in fencing. It is a beam type of fence post with an integral feature for supporting the barbed wire.

Not subject to breakage or removal, as is the case with the type of construction calling for separate arms, the new post gives two-way protection. Congratulations on this and on your fiftieth anniversary, Mr. R. C. Stewart.

Floor Nurse

A floor nurse merely carries out the doctor's orders with native intelligence and an acquired technique. School floor nurses by and large are a fine crew. Their chief flaws, we should say, are that some of them attempt medication on their own initiative, and others must blindly follow the orders of an old-fashioned practitioner.

Is not one of these the explanation of the high morbidity and mortality rate of almost all school floors? The average life span, floor by floor, in schools has not kept pace with scientific progress. Your business and mine is to reduce this economic waste.

Pardon us, Gentlemen, if we suggest that you consult a specialist. Under his orders floor nurses can improve the routine daily care given the sick, carry out new scientific treatments and perhaps snatch from early destruction sick floors of many types. One of the several reliable floor medical services is that maintained by the Hillyard Chemical Company, 801 S. Ninth Street, St. Joseph, Mo. Its men will visit any school for free consultation.

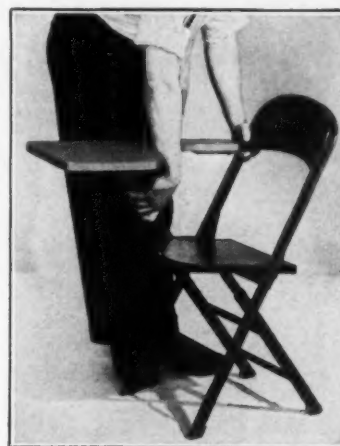
Stage ● Equipment

Velour Curtains * Draperies *
Scenery and Rigging * Equip-
ment of the Highest Quality
* Service and Installation by
Experienced Personnel * Write

TWIN CITY SCENIC COMPANY

1126 CHIMES BUILDING, SYRACUSE, N. Y.
2819 NICOLLET AVENUE, MINNEAPOLIS, MINN.
602 MARQUETTE BLDG., DETROIT, MICHIGAN
4704 PERSHING AVENUE, FT. WORTH, TEXAS

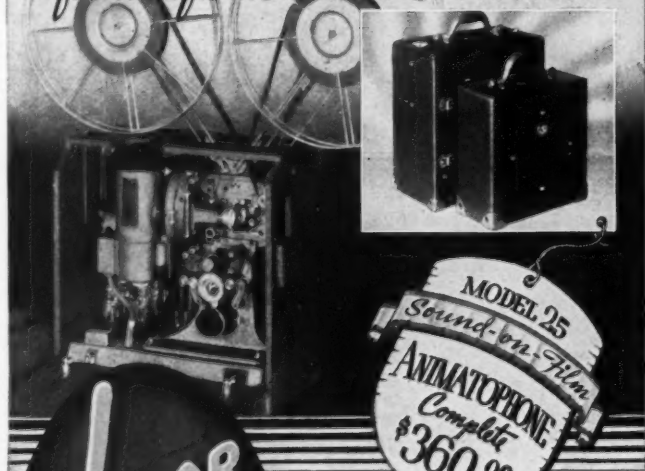
THE IDEAL FOLDING CHAIR
IN THE AUDITORIUM, THE DETACH-
ABLE ARM IN RESERVE—FURNISH
INSTANT ECONOMICAL ACCOMMO-
DATIONS IN AN EMERGENCY



CLARIN MFG. CO.

4640 WEST HARRISON ST., CHICAGO, ILL.

*NOW You Can Have Quality Sound
for a trifle more than Silent Cost!*



Model 25 ANIMATOPHONE is the world's lightest, most compact, lowest-priced High Quality Sound Picture Reproducer. For only a trifle more than Silent Cost, it provides the facilities for running both Silent and Sound Films. (Total weight, 45 lbs.) Its Performance-Ability is a known and proven quantity . . . for it embodies the same features that have made VICTOR'S Super Hi-Power Model 24 the world's most widely used 16 mm Sound Projector. ANIMATOPHONE 25 will amaze you . . . Arrange NOW to see and hear it! (Operates on either A. C. or D. C.)

VICTOR ANIMATOGRAPH CORPORATION
DAVENPORT, IOWA, U. S. A.

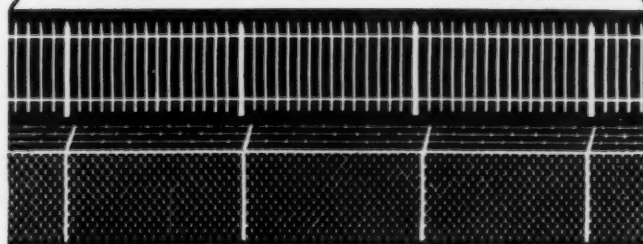
FENCE
*for the PROTECTION
of school children
and school property*

IRON and CHAIN LINK WIRE
FENCES and ENTRANCE GATES

Stewart IRON and WIRE
FENCES

New Catalog Sent on Request

The STEWART IRON WORKS CO., Inc.
336 Stewart Block - - - Cincinnati, Ohio



A Great Conservator of Human Values in the American Classroom



THE POSTURALLY CORRECT AMERICAN UNIVERSAL BETTER-SIGHT DESK

ACCEPTED BY THE COUNCIL ON PHYSICAL
THERAPY OF THE
AMERICAN MEDICAL ASSOCIATION

Incorrect postural and visual working conditions protracted through long hours and years of school life tend to make poor posture habitual and its effects chronic.

Faulty classroom equipment is believed to be a contributing factor in a wide range of physical disorders and particularly in generally lowered energy, decreased visual efficiency, and in mental retardation.

Correct postural and visual working conditions made natural and comfortable by the American Universal Better-Sight Desk, go far to protect the child from eyestrain and the postural evils incident to school work . . . thereby contributing to vigorous physical and mental development and minimizing many of the needless wastes of human values.

Classroom posture posters and interesting pamphlets relating to healthful posture and eye-protection are available for teachers' use. Address Dept. N.S. J.

AMERICAN SEATING COMPANY



Makers of Dependable Seating for Schools,
Churches and Public Auditoriums

General Offices: GRAND RAPIDS, MICHIGAN

DISTRIBUTING BRANCHES IN ALL TRADE AREAS

THE BOOKSHELF . . .

THE YEARBOOK OF EDUCATION, 1935. *Joint Editorial Board: Lord Eustace Percy, Sir Percy Nunn and Professor Dover Wilson.* Pp. 968. London: Evans Brothers Limited, Russell Square. 35 shillings.

Valuable and significant review of education in the English speaking nations with special emphasis on Great Britain and its commonwealths. Recommended for college libraries.

RETURN TO PHILOSOPHY. By C. E. M. Joad. New York: E. P. Dutton & Co., Inc., 1935. Pp. 279. \$2.50.

Developing a plea for philosophy as a guide to life, our English friend takes several telling thrusts particularly at Huxley and Lawrence. A meaty book for a quiet evening's reading.

UNSOLVED PROBLEMS OF SCIENCE. By A. W. Haslett. New York: The Macmillan Company, 1935. Pp. xi+317. \$2.

In the midst of our bewildering discoveries in science, a noted scholar rises to remark about some of the unsolved problems that science now faces. Progress to date appears like a small series of pin pricks on an enormous surface. Science reading for upper secondary schools.

A MANUAL FOR HISTORY MUSEUMS. By Arthur C. Parker. New York State Historical Association Series, No. III. New York: Columbia University Press, 1935. Pp. xv+204. \$3.

Practical suggestions and plans for the development and administration of history museums within our communities. Effectively illustrated.

WAYWARD YOUTH. By August Aichhorn. New York: The Viking Press, 1935. Pp. xiii+236. \$2.75.

Psychoanalysis as a method for study of delinquent children as a basis for their positive reeducation.

GUIDING OUR CHILDREN. *Helping Children to Find and Face Reality.* By Frank T. Wilson. New York: Globe Book Company, 1935. Pp. iv+248. \$2.

A conservative and simple treatment of child problems for conservative parents.

THE RELATIONSHIP OF CITY PLANNING TO SCHOOL PLANT PLANNING. By Russell A. Holy. Teachers College, Columbia University Contributions to Education, No. 662. New York City: Bureau of Publications, Teachers College, Columbia University, 1935. Pp. viii+135. \$1.50.

Treats a much neglected field in planning. School planners have frequently neglected city planners and city planners have brushed aside school planning as of little consequence. This dissertation is an attempt to show relationships and determine essential integrations.

PERSONALITY MALADJUSTMENTS AND MENTAL HYGIENE. By J. E. Wallace Wallin. First Edition. New York: McGraw-Hill Book Company, Inc., 1935. Pp. xii+511. \$3.

One of our able and practical authorities presents a textbook in a vital and too little known field. Extensive case histories taken from the author's clinical experience illustrate aptly much of the textual material. A desirable addition for the teacher's professional library.

LEADERSHIP OR DOMINATION. By Paul Pigors. Boston: Houghton Mifflin Company, 1935. Pp. xiii+354. \$3.

Sane analysis of the differences between leadership as it must be conceived and developed democratically and leadership that tends to be pure domination or fascist in practice. Written specially as a text for teachers. Recommended highly for teachers' professional libraries.

Modern-School Algebra

JUST PUBLISHED

THIS book offers a standard, modern course for the first year of high school. Topics are skillfully developed to insure thorough understanding of concepts; principles are applied in abundant practice for certain mastery. The larger meaning and the significance of algebra are effectively brought out in the full treatment of the subject. The book meets fully the new College Entrance Board requirements.

Send for information

WORLD BOOK COMPANY

Yonkers-on-Hudson, New York

Boston

Atlanta

Dallas

2126 Prairie Avenue, Chicago

San Francisco

Portland, Ore.

MEETS FULLY THE NEW COLLEGE ENTRANCE BOARD REQUIREMENTS

SIGHT and Forsyte

The startling fact that $\frac{1}{4}$ of our school children have defective eyesight has led to a demand on the part of sight-protective authorities for a sight-protective chalk crayon. To meet this demand Forsyte (For Sight) has been developed.



HYGIEIA FORSYTE

HYGIEIA FORSYTE - sight-protective dustless crayon. Especially recommended for school rooms where lighting conditions are not entirely ideal.

WALTHAM FORSYTE

WALTHAM FORSYTE - sight-protective "soft" chalk crayon. Also recommended for classrooms where ideal visibility conditions are not possible.

FREART FORSYTE

FREART FORSYTE - sight conservation chalk crayons. Recommended for specialized sight conservation classes involving children whose vision is subnormal.

• • Safeguard the eyesight of your school children. Investigate FORSYTE!

Send for folder, "What Price Eyesight?"



"SHARING WITH YOU OUR 100 YEARS OF PROGRESS"

THE AMERICAN CRAYON COMPANY

485-585 HAYES AVENUE, SANDUSKY, OHIO - 200 FIFTH AVENUE, NEW YORK CITY
116 NEW MONTGOMERY STREET, SAN FRANCISCO - SANTA FE BUILDING, DALLAS, TEXAS

The Unit-Activity Reading Series

By NILA BANTON SMITH

These texts are meeting the needs of present day Reading Instruction by accomplishing the following objects.

1. Children who use these books are oriented in the modern world.
2. Initiative and mental growth are developed through the child's own activities which are promoted by the unit topics, the activity stories, and the supplementary materials.
3. The readers provide experience in group-living, while the children learn to work cooperatively with each other.
4. Ample freedom is allowed for individual self-expression.
5. The children are led to develop a tolerant understanding of other peoples, nations, and religions, as well as our own.

Write for information about the rich program of accessory materials.

Silver Burdett Company

New York Newark Boston Chicago San Francisco

PAGE FENCE



PAGE ENGINEERS ANNOUNCE A New LINE POST!

Time marches on—and PAGE engineers again lead the way. Heretofore, fence posts have been adaptations of existing sections. Now PAGE gives you the new wing channel line Post designed especially for fence and fence alone with many advantages resulting—superior galvanizing, greater strength, a far neater more serviceable installation.

PAGE is recognized as the pioneer in the fence industry. PAGE was America's first wire fence. Since no one metal is suitable for all fence conditions we pioneered in offering fence in a variety of metals—PAGE-ARMCO Ingot Iron, PAGE "ALCOA" Aluminum, PAGE Allegheny Stainless Steel, PAGE Copper-Bearing Steel, PAGE genuine Wrought Iron.

Located throughout the United States are 92 Page Fence Distributors who will gladly consult with you, without obligation, in best solving your fencing problem. They are prepared to recommend impartially the particular metal that will give you the best service and to assume full responsibility for proper installation.

Write to any one of the offices shown below for helpful literature and name of the Page Fence expert nearest you.



PAGE FENCE ASSOCIATION BRIDGEPORT, CONNECTICUT

New York Pittsburgh Atlanta Chicago San Francisco

This Label . . . Your Guarantee

The PAGE P-12 label identifies PAGE galvanizing which is guaranteed to withstand a minimum of 12 one-minute dips by the Preece Test. PAGE P-12 galvanizing applies not only to fence fabric but also to posts, top rail and fittings as well—your guarantee of maximum resistance to rust.

AMERICA'S FIRST WIRE FENCE . . . SINCE 1883

THE TEACHER IN MODERN EDUCATION. *A Guide to Professional Problems and Administrative Responsibilities.* By Alfred Victor Overn. Appleton-Century Series in Administration. Edited by Fred C. Ayer and Fred Engelhardt. New York: D. Appleton-Century Company, Inc., 1935. Pp. xiv+374. \$2.25.

Useful as a book in an introductory course starting with the teacher as the unit and attempting to relate administrative procedure to his task.

PHILOSOPHY AND THE CONCEPTS OF MODERN SCIENCE. By Oliver L. Reiser. New York: The Macmillan Co., 1935. Pp. xvii+323. \$3.50.

An attempt to synthesize and interpret the principles of science into a comprehensive philosophy. The author's task is no mean one. His contribution will find many disagreements both among the scientists and the philosophers. The volume is an unusual attempt to establish those unifying principles essential to the maintenance of our culture. A humanistic interpretation.

INCOME AND ECONOMIC PROGRESS. By Harold G. Moulton. Washington, D. C.: The Brookings Institution, 1935. Pp. xi+191. \$2.

The last of four studies concerned with the distribution of wealth and income in relation to economic progress in the United States. Outlines program for maintaining a more steady rate of economic progress.

MAN, THE UNKNOWN. By Alexis Carrel. New York: Harper & Brothers, 1935. Pp. xv+346. \$3.50.

In the midst of a plethora of economic writings with their final inconsequentialities this book on Man comes as a most welcome interlude. A scientist drops his laboratory tools and writes fascinatingly of changes man must make in his social and economic order if he hopes to survive. A refreshing return to man and away from the machine. A work of real significance to all teachers.

INSURANCE AND ANNUITIES FROM THE BUYER'S POINT OF VIEW. By E. C. Harwood and Bion H. Francis. Cambridge, Mass.: American Institute for Economic Research, 1935. Pp. xiv+174. \$2.50.

A simple statement of the fundamentals of life insurance and annuities that should be helpful to every member of the teaching profession in arranging individual and group programs.

INTRODUCTION TO EDUCATION. Revised Edition. By Frank L. Clapp, Wayland J. Chase, and Curtis Merriman. Boston: Ginn and Company, 1935. Pp. xix+569. \$3.

Revised edition of a well balanced and sensible book for beginning classes in education; also an excellent text for a general survey course for nonprofessional students.

Just Off the Press

EDUCATION FOR CITIZENSHIP IN SECONDARY SCHOOLS. Issued under the auspices of the Association for Education in Citizenship. New York and London: Oxford University Press, 1936. Pp. x+263. \$1.50.

GENERAL SHOP WOODWORKING. By Verne C. Fryklund and Armand J. LaBerge. Bloomington, Ill.: McKnight & McKnight, 1936. Pp. 128. Illustrated. Single copies, 72c postpaid; two or more copies, 54c plus postage.

THE MOUNTING WASTE OF THE AMERICAN SECONDARY SCHOOL. By John L. Tildsley. The Inglis Lecture, 1936. Cambridge: Harvard University Press, 1936. Pp. 91. \$1.50.

WEARING GLASSES. By Walter B. Lancaster, M.D. Chicago: American Medical Association, 1936. Pp. 23. 10c. (Paper cover.)

POINTERS ON POLIO. By Morris Fishbein, M.D., and others. Chicago: American Medical Association, 1936. Pp. 12. 10c. (Paper cover.)

CONTENTS

For April, 1936

Side Glances—

SECTION I—EDUCATIONAL ADMINISTRATION

Looking Forward	13
The Editor makes an evaluation of the PWA, takes issue with those sociologists who think that the home has failed, and calls attention to the phonograph record of historical events as an instrument of instruction.	
Hitting the Right Note at Interlochen.....	16
Widely known for his radio classes in the playing of stringed and wind instruments and in singing, JOSEPH E. MADDY, professor of music, University of Michigan, is a guiding spirit behind that stirring venture, the National High School Orchestra and Band Camp at Interlochen, Mich., which he describes in this article.	
Child-Teacher Relations Are Experiencing a Shift in Emphasis....	20
What constitutes a desirable child-teacher relationship is discussed by WILLARD C. OLSON, director of research in child development, University of Michigan.	
Teacher Preparation Moves Forward.....	21
Kentucky's latest step toward higher training and certification standards for teachers is summarized by RICHARD E. JAGGERS, director of teacher training, state department of public instruction, Frankfort.	
Teaching Typing in the Grades.....	22
How should it be taught—by touch, symbols or hunt and peck? RALPH HAEFNER, New York City, author of several books on elementary school typing, gives his views.	
Two Major Issues in State Administration.....	25
M. M. CHAMBERS, specialist in school law, raises the questions: (1) To what extent should we have internal unity in state educational administration, and (2) to what extent should the educational arm of the state be free from interference in its detailed financial administration by other fiscal authorities?	
Design for Curriculum.....	27
Some principles of curriculum administration for the secondary school that have been worked out in Berkeley, Calif., are discussed by H. N. MCCLELLAN, director of curriculum in that school system.	
Pictures Are Easy to "Read".....	30
Does your annual report really interpret the school system to the community? HEROLD C. HUNT, superintendent of public schools, Kalamazoo, Mich., thinks his does, now that he has made it mostly photographs.	
Not a Business.....	34
What is not a business? Education, according to ARTHUR F. COREY, assistant superintendent of Orange County Schools, Santa Ana, Calif. His stress is upon the administrator's responsibility in any attempted reorganization in education.	
Marking Pupils on Their Working Ability.....	35
Pupils' marks are the teacher's despair. A. ELWOOD ADAMS, district superintendent of schools, Rosemead, Calif., presents a child accounting plan that he thinks has real merit.	

ONE of the grievances named in the Texas Declaration of Independence a century ago was the lack of a school system. Texas pioneers cocked their guns and unsheathed their swords partly because they wanted schools.

So says L. A. Woods, superintendent of public instruction of the state that this year will celebrate its 100 years of political freedom. The history of the state's educational system will be told in a well illustrated article for May—a story of pioneer determination, lavish public domain and 19,000 oil wells.

"WHAT Price Administration?" asks A. H. Horrall, assistant superintendent of public schools, San Jose, Calif., in an article prepared for the May number. Economic pressure pushes many good teachers out of the classroom and into administrative posts, with results that are not always happy. Many a good teacher becomes a mediocre administrator, while many an excellent teacher becomes a good administrator, successfully climbing the salary ladder. Yet only an administrator can know, Mr. Horrall declares, the sacrifice he makes each day because of his position.

BIG money must go into school plants and employment figures in this field must rise even above the 1929 peak, another May author, A. H. Hinrichs, states. Citing five recognized social trends in the United States, he suggests their implications for education.

New objectives in education will govern the design of the school plant. The new needs include more auditoriums, libraries, scientific laboratories and special consideration for art and music.

Published monthly by The NATION'S SCHOOLS PUBLISHING CO., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

CONTENTS

This means larger expenditures for education, particularly for buildings.

A reasonable program, according to engineers' estimates, would involve expanding employment for educational plants from the 1,069,000 in 1929 to 2,900,000, the largest percentage of increase in any type of employment. These, of course, are hypothetical figures on the amount of labor necessary to produce what is believed to be the nation's needs in school construction.

SCHOOLS have for some time been aware of the deleterious effects of poor lighting and poor ventilation. Now they are beginning to realize the toll that excessive noise takes of pupils and teachers.

How changed is the school picture in the two Philadelphia schools in which acoustical treatment has been installed! Irwin T. Catharine, superintendent of buildings, writes enthusiastically on the subject in an article prepared for the May issue. Teachers find it easier to hold the children's attention, they do not have that "fagged out" feeling at the end of the day, behavior is better in classroom and corridors and there is a restful dignified atmosphere in the building. It sounds a great deal more like paradise than public school.

YOU will feel like an accomplished ratologist after reading Joseph N. Laferriere's second of two articles on "Routing the Rat" scheduled for publication in May. This entomologist and consultant certainly has a gift for exposition; he makes the trapping of rats sound like the sport of kings.

ANOTHER article for next month has a bearing both on curriculum and school plant. Written by W. W. Simmons, architect of school buildings, state department of education, Atlanta, Ga., it is entitled "The Passing of the Skilled Mechanic." Is it true that we are entering upon a great construction boom with fewer young men trained for the building trades than ever in our history? Our Southern contributor's answer is affirmative.

Economics in the Secondary School..... 37

Many adults show evidence of unsound economic education. If the public can learn unsound economics, perhaps a sound economic education is possible, if we begin with the younger generation. Supt. W. W. Haggard of Joliet Township High School and Junior College, Joliet, Ill., tells of the attempt being made in his school.

School Aid in Reducing Motor Accidents..... 38

SIDNEY J. WILLIAMS, director of the public safety division, National Safety Council, suggests a five-point program.

Understanding and Teaching the Atypical Child..... 39

A psychiatrist, Dr. Frederick L. Patry of the New York State education department, uses an anecdote as the text for a quasi-psychoanalytic discussion.

The Teacher's Working Day..... 41

A teacher in the Davis School, Newton, Mass., Stuart Dean, tells how long 270 teachers work daily and what forms of work they do.

Happy to Say..... 42

WILLIAM McANDREW recommends a sort of Coué method for building personal pride in the teaching profession.

SECTION II—THE SCHOOL PLANT

Grant Union High School, North Sacramento, Calif..... 43

Full-page illustration of this building of monolithic concrete construction designed by Harry Devine, Sacramento architect. The building has three units joined by an arcade.

Complete as It Stands..... 44

Four miles out of Kansas City, Kan., rises the new Washington Rural High School, a thoroughly modern building erected at a remarkably low cost. Owen H. Coberly, the principal, describes the architectural features and equipment.

Less Noise Sounds Well..... 49

The first of two articles by Irwin T. Catharine, superintendent of buildings, board of public education, Philadelphia, on the acoustical treatment of schools.

Ready for Play for Leyden!..... 51

GEORGE V. DEAL, principal of Leyden Community High School, Franklin Park, Ill., describes in detail how a twenty-acre plot has been developed into a modern athletic field.

Safety Rules for School Bus Riders and Drivers..... 54

As worked out by Roben J. Maaske, in charge of rural education and school law, state department of education, Oregon.

A Small School Serves Lunch..... 55

Given a completely equipped lunchroom and kitchen, the Millsboro Public School, Millsboro, Del., faced the problem of conducting a self-supporting cafeteria. J. M. Bennett, the principal, explains how this was accomplished despite numerous handicaps.

Pied Piper Plays a Modern Tune..... 60

The first of two articles on rat extermination by Joseph N. Laferriere, consulting entomologist.

Is High School Planning in Its Infancy?..... 64

It is in one phase, at least, according to Homer W. Anderson, superintendent of schools, Omaha, who urges research to discover the basic principles for assembling the building and to determine the best methods of applying them to the planning of the building.

Better Plant Practices..... 66

News in Review..... 68

Private Schools..... 70

Regional News..... 72

Visual Education..... 76

Radio News and Programs.. 78

Names in the News..... 80

Coming Meetings..... 82

Notes for Buyers..... 84

The Bookshelf..... 86

LOOKING FORWARD

PWA—An Evaluation

PUBLIC works programs by the federal government represent nothing new in our history. Since our national beginnings there have been annual appropriations which must be classed generally under this heading. The Hoover administration not only advocated extensive public works but approved large specific appropriations. The present administration merely enlarged upon the idea with a fanfare of publicity.

Up to 1932 the federal public works projects were generally concerned with land reclamation, rivers and harbors, roads and federal buildings. The first co-called PWA bill merely expanded the list of socially worthy projects. Its history takes the public works program and administration definitely from the field of partisan politics to that of a continuing national policy.

There are a number of theories behind the permanent federal public works program all of which undoubtedly have a certain degree of validity. One considers a huge program as a stimulus in times of economic stress, the "priming the pump" idea. Another closely allied assumption is the return by the federal government to outlying areas of some of the wealth that has been drained from all sections by the concentration of capital in our large urban centers. Aids to roads fell in this class long before the present depression.

Regardless of current diversity of viewpoint it seems quite logical that this general federal policy will continue no matter what the political complexion of the current government happens to be.

Future federal public works will probably be influenced to a considerable degree by the experiences of the last three years. Social justification must be found for expenditures of this type. Certainly reclamation and wise conservation of natural resources will claim much of this revenue and the building of needed school plants for child, youth and adult represents another undeniably justifiable expenditure.

If this contention is true, it may be wise at this time, the interval between the first two and the coming third general public works program, to evaluate the activity as currently expressed from the school standpoint.

Examination into the efficiency of the PWA in different sections of the country results in a variety of opinions and judgments by districts and within districts.

Careful analysis of these opinions leads to the belief that where PWA was administered by capable engineering or architectural personnel efficient results were secured; where state administrators were less capable the results were poor. Good local administrators managed to make up even for some weaknesses in the Washington offices.

There were, however, a large number of weaknesses apparent, so far as the schools are concerned, in the central administration of PWA. These grew out of the emergency itself and certain methods in Washington.

With respect to school buildings there was a lamentable lack of planning. No specialists in school buildings or in school administration were called into conference. So far as the Washington authorities were concerned, apparently nothing had been accomplished in school plant planning and location. These new and amateurish administrators were blithely unconscious of a large and valuable research literature. Instead of supplementing their ignorance by insisting that all projects clear through the state superintendent of public instruction's office with respect to need and type, the plans were considered without such stabilizing references.

Speed was such an essential of every contract that plans and specifications were rushed incompletely to completion. The rush required for early drawing up of plans and specifications was completely matched and balanced by the inertia of the technical divisions from which progressive approval and review were required. Superintendents, architects and contractors quickly slid into a jittery condition while the amateur bureaucrats went about their affairs without warmth or worry. The inflexibility inherent in centralized administration that seemed to know little and show no enthusiasm for learning more about diverse conditions in different sections of the country was forcefully demonstrated throughout both programs.

These, however, were relatively slight annoyances when the entire problem is reviewed. Bureaucratic ideas concerning competitive bidding without knowing the school game quickly forced PWA school jobs both in structure and equipment on a price rather than a quality buying basis. Old and reliable purveyors to education with reputations for probity and quality, built upon several generations of business, received little or no recognition. Unless they could bid on a price basis they were

lost. Fortunately many of these concerns refused to cut quality. They missed the business but their reputations will not suffer when the maintenance costs start piling up a few years hence. Price buying was one of the worst features of PWA.

The federal system of matching pennies with school districts, first on a 30 and then on a 45 per cent basis, was reprehensible as a finance policy from the beginning. It offered nothing to districts whose earlier efforts had forced them to extend their credit to the maximum. It offered everything to the districts that had been negligent in the past or were fortunately situated with respect to a taxation base. Need was not the most obvious factor except in isolated cases. The bogging down of local school districts with greater debts when they could not even carry their current expense has retarded improvement of general educational conditions.

PWA must be charged with all of these deficiencies by anyone who studies the problem calmly.

But—after admitting all of these weaknesses—we still come to the conclusion that the general principle underlying the public works program as a concept is sound and will work if reorganization is made before the next program becomes effective. It has also become obvious that the safest means for direct federal subsidy to public education is through stimulation of the building program.

Certain improvements are essential for future programs. In the first place, intelligent central administrative direction is necessary. Provision should be made for a specialist in public school plant to sit as a member of the reviewing body in Washington. The control of initial approval of the project should rest with the state departments of public instruction. Every request that cannot pass such scrutiny should stop at this point. The underlying principle upon which grants are made should be not only numerical need but the degree of improvement the new structure offers to administrative organization. Unless the factor of improvement is stressed, a lot of unnecessary buildings will be erected.

School districts should not be permitted to match dollars for capital improvement with either the state or the federal government. These future PWA grants should be given for need and improvement and not in terms of borrowing ability. They should be on a 100 per cent basis. Plans and specifications must become the responsibility of the state. If the federal government desires to make periodical appraisal, that is well and good, but the administrative responsibility must be placed in the state.

There is much of value for public education in future public works programs if these glaring weaknesses are definitely corrected. Judging by the signs of the times there is definite indication that they will be changed before the next program drops into our laps. In the meantime, it might be wise for the states themselves to do a little planning to be ready for the future.

Shall We Discard the Family?

SPECIAL stimulus has been given during the depression period to sociologic investigation of problems arising in toto or in part from its effects. In urban areas attention has been focused upon the problem of youthful delinquency. Some of the data already collected are startling. Since the methods of reporting and correcting delinquency have changed so radically within the past two decades there is no adequate background of data for comparative purposes. The frequent use of the term "worse than" has relatively little significance. It is also entirely possible that many of these sociologists read a personal point of view and an emotional coloring into their findings.

Recently we studied a report on youthful delinquency that had all of the merits and all of the faults peculiar to these high-spot investigations. Among its major findings was that the problem of delinquency tended to be much greater in the case of broken homes. This fact has long been known to the teacher. It then went further to declare that the major cause of delinquency was the home! Because the home was obviously failing, it was necessary for other social institutions to take up the responsibility and make up for the deficiencies of the family.

The conclusion that the home is the chief factor in delinquency is to be seriously doubted. Despite all the rural, economic, religious and social conflicts that arise within the home, such a sweeping generalization from small data is scarcely scientific in either concept or promulgation. The second step in this easy argument that, since the home has obviously failed, it is necessary for some social institution like the school progressively to replace it is also open to objection on the same grounds.

The home, like other institutions in this country, is in a state of transition from the patriarchal to the democratic model. Many obvious weaknesses are apparent, based on traditional concepts and ideologies. It is quite possible that during this transition period the character of the home may be completely changed and some of its privileges reduced. However, to assume that the home has failed and should be supplanted by some social institution is obviously too amateurish in tone even to be considered seriously.

Our sociologists must secure a much larger area of objective data before they are ready for any conclusions. If, after really scientific field studies, vital shortcomings in the home are indicated, it might be well for the craft to consider various solutions. It may be possible to rebuild the home instead of consigning it immediately to the scrap pile and substituting something institutional. None of our institutions show a high enough rate of efficiency to inspire much confidence in their capacity to perform this task more intelligently.

In our own estimation the foundation and continuation of a democratic society will depend to a large

extent upon the development and strengthening of the primary democratic unit — the family.

The public school, as a vital agency in cultural development, is faced with this dual problem. On the one hand there is the institutional temptation to push the development of infant education in preprimary and nursery units and thus increase its institutional prominence and power. On the other hand, the school has the possibility of stimulating the evolution of the democratic family unit through a rational program of parent and child education in the art of home building.

Reproducing Devices

IN THE emphasis placed in recent years on radio as an agency in the instructional process it is quite apparent that the possibilities of its older sister, technical reproduction by means of the permanent record, have been distinctly slighted. They have been brushed aside in much too casual a manner. This statement does not attempt in the least to belittle the actual and potential values of radio, but merely expresses the belief that reproduction by record also has instructional value.

The use of permanent records in reproduction has received only light study in the past. The typical school, equipped with a single reproducing machine, used this instrument more as an extra gadget than as a fundamental and valuable aid in instruction.

The value of the radio is immediate. Its programs or speeches cannot be reproduced at pleasure. Readings by poets, speeches by statesmen, the voice of the singer, the concurrent enactment of scenes with future historical value by eye witnesses and many other vital events cannot be recaptured unless they are permanently transcribed in the form of records. If our schools today possessed such records from the past, they would be priceless to education! Consider the value of a direct recording of the Gettysburg speech by Lincoln; the views of the forefathers, so grossly misconstrued at times, on the problems of government; the ever recurring voice of our great philosophers and teachers!

The use of the record is not confined to fine arts alone. While instrumental and vocal music and the voices of sculptors, painters, poets and novelists may be used for their motivating and orienting value, they form only a small part of a large field. The social studies are also particularly affected. Health and physical education and the exact sciences offer excellent possibilities for recording vital statements of our philosophers, scientists and master physicians. The direct views of economists and captains of industry may be presented with clarity and reflective value.

The expense involved in the use of recorded information is not great. It may be used through the building sound system or through reproducing machines within each curricular division or room, depending upon the

emphasis and method of administration. Records may be easily administered through the general library just as are other supplementary instructional materials. Use of these supplementary recorded materials does not displace any other instructional devices now employed.

Possible Educational Change

THE discussion by Walter N. Polakov, author of "The Power Age," in the February issue of *THE NATION'S SCHOOLS* of the implications of modern technology for public education is significant. As one of our outstanding industrial engineers, Walter N. Polakov is eminently capable of indicating the specifications that industry in the future demands of education. The application of these specifications he intelligently passes to the professional educationist.

Excluding general cultural training, the three major requirements on the part of individuals for living in the Power Age are described as: sustained attention, correct perception and quick reaction. Polakov discards rather completely and with some force the contentions of the specialists in vocational education who still insist on specific training for trades and specialized industrial tasks within the school. He believes that the need for such training is already past so far as the schools are concerned and that whatever training of an apprentice type remains can be much better performed in the shops. He implies that technologic change in industry and varying tastes in living may sweep aside over night even our current trades.

Admitting the possibility that Walter N. Polakov may be thinking ten or twenty years ahead of the present, there is still a distinct challenge to education. If even one-half of the technologic change already past the blue print stage is accomplished, the instructional program of the schools must be radically changed.

One thing appears certain. Heavy industrial education must undergo a radical change. Specialized shops and expensive, quickly changing equipment belong to the past. The place of the shop in the future general education plan will tend more toward the fine arts than to vocational education. There will also be much closer relationship between industry and the school. Greater harmony and coordination of rural and urban education will be possible.

Education cannot remain isolated or stand apart from cultural change. Its character will be determined by forces beyond its control. Even the extent to which the profession will participate directly in making these changes will be determined somewhat by the open-minded intelligence with which it is able to cooperate with lay groups and recognize these new forces.

The Editor

Hitting the Right Note at Interlochen

By JOSEPH E. MADDY



Gabrilowitsch (left) was once a guest conductor.

WHEN the National High School Orchestra Camp Association was incorporated in 1927 it inaugurated a new era in music education. To be sure, there had been various forerunners in that several recreation camps had had singing periods and several bands had "gone camping." I recall a four weeks' camping trip by a boys' band in the year 1901!

But the National Music Camp was probably the first full-fledged music camp in which all activities centered around music education and regular music courses were pursued by the campers. The camp was created to further music education in America and to provide both outlet and stimulus for musical talent in the youth of this country. It is a summer school

of music, where work, health and recreation are sanely balanced for the development of fine character. Only one rule prevails at this camp—"Do the right thing at the right time."

For the accomplishment of this purpose, a highly capable faculty and an efficient staff are necessities. To Interlochen, Mich., are brought only teachers who have established high records of attainment in the music world. Competent athletic directors for boys and for girls and other trained assistants are in charge of nonmusical activities. The meals are in charge of a competent dietitian, who assumes the heavy responsibility of furnishing three nourishing and palatable meals, on time, for 300 or more persons daily.

To explain the purpose of the camp

we must go back to its inception, and even further. The National High School Orchestra and Band Camp is an outgrowth of a temporary organization assembled in Detroit in 1926 to play for the Music Supervisors' National Conference. This group, numbering 230 players chosen from high school orchestras in thirty states,





In a sylvan setting the music camp pupils practice. On these pages a band marches along the state highway, a drum majoring class stands at attention, a section of the orchestra is at daily practice, and a young violinist seeks inspiration in the forest.



gathered for four days of preparation for a concert conducted by Ossip Gabrilowitsch and Joseph Maddy.

The music supervisors were incredulous. Assembling such a large group of young musicians from all parts of the country and welding them into an organization of competent players clinched forever the place of music as a fundamental subject in the public schools. The National High School Orchestra came over the horizon on the most promising movement yet undertaken for the musical

education of youthful Americans.

The second assemblage of the orchestras was for the convention of the Department of Superintendence, National Education Association, at Dallas, Tex., in February, 1927. This group, numbering 268 players from thirty-nine states, gave eleven concerts during the convention. New inspiration and prestige were the result.

The growing orchestra came together for the third time in April, 1928 for the Music Supervisors' National Conference held in Chicago.

The group now numbered 311 players, representing thirty-six states. They rehearsed for a week, then gave a thrilling concert under the direction of Frederick Stock, Howard Hanson and Joseph Maddy.

Camp Established in 1928

By this time the full potentialities of such an amazing triumph of youth became evident. Meeting a few days a year, the orchestra had achieved prodigiously. But such a short time was entirely inadequate if the full possibilities of the movement were to be realized. Establishment of the National Music Camp accordingly followed in the summer of 1928.

The idea of a summer camp, in which pupils could work and play together for many weeks, first was broached at the Dallas meeting. The plans were hailed with enthusiasm on every side. Many weary months of planning were necessary before the camp became a reality, however. A nonprofit educational corporation was formed, a site was secured, buildings were erected, a music library was purchased, instruments were purchased and rented, all on borrowed money.

The first summer session brought 115 pupils from twenty-five states. All were picked for their musical

ability, many being sent by schools and clubs. Musically the first session was a great success. Financially, well, that was a different story. With an issue of debenture bonds, the first season was tided over. The second season the personnel had grown to 232 pupils, and that was what mattered most to those dreaming of a national musical renaissance for the youth of this country. There were fifty-one extension course pupils and seventy counselors and instructors. The need for such a camp had been proved. Questions of finance to the contrary, a national high school orchestra had evolved from the experimental stage into a vital force in the musical development of the nation.

Orchestra Goes on Tour

In 1930 the National High School orchestra was assembled and played for the Department of Superintendence convention, giving, by the orchestra and its members, thirty-nine musical programs for these educators. Walter Damrosch and Joseph Maddy were the conductors. When the convention closed, the orchestra went on tour, playing in Philadelphia, New York and Washington, winning the admiration of official Washington, including President Hoover, and of the

musical aristocrats of our capital. A large number of the members of this orchestra came to camp in the summer.

The success of the first supervisors' division led to the establishment of a separate music supervisors' camp, with accredited courses in orchestra, band, choir, conducting, composition, methods and acoustics. This division gives a supervisor an opportunity to acquire practical knowledge in the music subjects which are most difficult to learn from the written page (may I say almost impossible to learn without the practical demonstrations?), and by helping to turn out better music teachers the camp feels it is taking an active part in bettering and making more interesting the music education of the many thousands of pupils who are unable to be a part of the camp.

School Loyalty a Prerequisite

Boys and girls, to become members of the camp, are recommended by the principal of their high school, and by the director of the band, orchestra or chorus of which he or she is a member. Loyalty to their school and to the school organizations is a first requisite for camp membership. Loyalty and a willingness to participate



The visitor at Interlochen may inspect pupil dormitories like this one.



A popular class is this one in elementary conducting, which is taught by Vladimir Bakalienikoff, assistant conductor of the Cincinnati Symphony Orchestra.

in school organizations are stressed at camp, for without high ideals the ability to play beautiful music avails one naught. An applicant to camp need not be the best player in his orchestra or band, but he must be a good citizen of his school. Character building must go on, and an unselfish and helpful attitude toward one's fellow pupils is stressed equally as much as "hitting" the right note.

The object of the camp is not to persuade students of music to become professional musicians. Many who play musical instruments quite well have other talents that offer greater opportunities. To them we say "good luck" and "keep on playing your horn for fun." Many play, but few are chosen. This muse is a hard taskmaster, and he who would follow her successfully must have a bit of the divine spark as well as a keen desire to succeed.

The routine followed at the National Music Camp is difficult and exacting and if, by the end of eight

weeks of practice and study in band, orchestra, chorus, composition, conducting, ensembles and sight reading, a pupil still has confidence in his ability to succeed in the professional field, we know the divine spark is there, and is accompanied by the will to succeed.

As evidence of this many former National Music Camp pupils are occupying prominent positions in most of the great symphony orchestras in the country. Frank Miller, N.M.C., 1928, now solo 'cellist of the Minneapolis Symphony Orchestra, was featured in a nationwide broadcast of Richard Strauss' *Don Quixote*.

Each summer the principals of the camp are pleasingly astonished by the number of pupils who go on from camp to college more often than not entirely dependent upon their own resources. In many instances they finish their education and return to the high schools and towns where they attended school as supervisors of music.

Now in its ninth year the National

Music Camp has passed the experimental stage and has earned the respect of the educational profession. Its campus now embraces 112 buildings, including classrooms, concert halls, hospital, hotel, library, practice rooms, studios and dormitories. Up-to-date sanitation and electrification are provided. The music library is valued at more than \$30,000 and includes 1,000 phonograph records as well as scores and music for every conceivable combination of instruments and voices.

The camp has received more than \$70,000 in contributions from foundations, organizations and individuals.

The National Music Camp is a strictly educational, nonprofit enterprise. Pupils are in daily contact with teachers and music leaders who are famous in the outside world. There is a spring of good will, kindness, enthusiasm and encouragement always bubbling up at Interlochen, and he who drinks therefrom goes away encouraged and inspired.

Child-Teacher Relations

Are Experiencing a Shift in Emphasis

By WILLARD C. OLSON

RECONSTRUCTION in the philosophy, management, curriculum and methods of instruction in schools has resulted in a changing conception of what constitutes a desirable child-teacher relationship. We can easily recall that the teacher at one time was practically in but one relationship to the child and that was an authoritarian one. She was the embodiment of parental authority, of organized society. She was a dominant individual, ruling by strength of maturity and personality or by force. Immediate and unquestioning obedience was the criterion of successful classroom management under this regimen, and efficient instruction consisted in the careful following of detailed plans with teacher-determined prescriptions of subject matter to be taken in exact doses at specified hours of the day.

Changing Role of Teacher

Progressive practices in recent years have tended to emphasize the development of individual and group responsibility for conduct and the utilization of subject matter as means for the successful performance of activities occurring in the child's daily experiences. Such a shift in emphasis must, over a period of time, be a significant factor in the personal and social development of children.

Teachers are not the sole custodians of the learning of children. Parents in the home, associates in the community and community institutions contribute to the modification of children through experience. The activities of many groups testify, however, to a strong belief that what the teacher is and does, what she thinks and believes, what she teaches and fails to teach are important factors

in the development of children and in a determination of the character of the social structure. It is, therefore, of interest to examine some of the changes occurring in the child-teacher relationship in response to new social demands and technical developments.

One of the most obvious reflections of a changed conception of the rôle of the teacher is found in the physical arrangement of the classroom and the conduct of the program. Rooms frequently have an informal appearance, with more space for movement and less fixity of the seating. The teacher has shown thought in arranging "centers of interest" where children may pursue in an informal fashion some of their individual interests in art, science, literature and shop activities. The daily program becomes a flexible thing with large allotments of time for general areas of work rather than brief sequences listed in terms of subject matter. The traditional subjects become means to functional ends rather than ends in themselves.

Informality in the Classroom

During the course of a year the children will engage in a number of cooperative activities growing out of a common interest and leading to common goals. Informal conversations and group conferences become important instruments in the solution of problems, in the resolution of conflicts and in the maintenance of a desirable level of social behavior. The child is encouraged in the development of responsibility for his own conduct rather than in dependence upon external authority.

Classroom practices of the foregoing types imply a rather basic reconstruction of the general social setting in schools. The shift in perspective involved leads readily to the abandonment by administrative authorities of selective theories of education and of competitive marking systems. The emphasis on an integrated development of the whole child has resulted in an enlarged conception of the teacher's responsibilities to the child, to the home and to the community.

Preventing Maladjustments

Present-day investigations in the general field of mental hygiene give additional weight to the rôle of the teacher as an environmental manager and point out a possible service as a careful observer of child behavior. In the next decade or two, the teacher will probably be charged with increased responsibility for making observations of such scope and accuracy as will permit the school to locate in advance children who are showing trends toward delinquency, dementia praecox and other forms of maladjustment. In researches of the University of Michigan, data have been collected and tabulated to indicate that school behavior furnishes an index to later maladjustments of a more serious character.

As methods for behavior modifications develop, the teacher will be called upon for early diagnoses to be used by specialists and by teachers in preventive work. The aggressive antisocial child and the withdrawing unsocial child will receive sympathetic understanding and treatment from

the teacher who is alert to the requirements of her position. Effective work on these problems will make greater demands for a professional knowledge of parent-child relations and methods of parent education.

The development of mechanical devices brings to the fore many unsolved problems affecting the child-teacher relationship. Experiments with the radio and motion pictures in instruction clearly indicate that the teacher of the future must consider how these mechanical devices are to be used effectively. Is she to become a less intimate guide for the child, or is she to be free for more effective services? The experience of many is that the

development of scientific equipment makes increased demands on a teacher and issues new challenges toward creative uses of the material.

It is obvious that there is a continuously shifting child-teacher relationship as new demands for co-operative technique emerge from social groups and as new requirements are made upon teachers from technical advances in education and related fields. Progress in these directions may be facilitated by the careful selection of individuals who are preparing to be teachers, by improved and lengthened training programs and by continued study on the part of teachers already in service.

who have completed curriculums at the level at which they are asking for certification, and (3) each certificate will show on its face the curriculum completed for its issuance.

The law makes it the duty of teacher-preparing institutions to offer curriculums at the school levels and in the subject fields according to need within these areas. It becomes the duty of the administrator to place a teacher where he is to work.

The council on public higher education is the responsible body assigned the task of guiding curriculum-making for the training of teachers. This council is made up of persons selected from the administrative staffs and governing boards of the institutions of higher learning and from the state board of education. The superintendent of public instruction is chairman of the council. Curriculums adopted by the council on public higher education must be approved by the state board of education. When so approved, they become the basis for the issuance of certificates. Curriculums are constructed to train persons to fill the different positions in the public school service, namely, teachers, principals, supervisors, superintendents, attendance officers and other workers.

The new school code placed the authority to certificate the professional staffs of the public schools of Kentucky in the hands of the state board of education and under the leadership of the superintendent of public instruction. The practice of issuing certificates by examination was abolished, and the authority held by state colleges to issue certificates to their graduates was transferred to the department of education.

Under the law every teacher coming into the profession (1) has been trained for the job; (2) will be assigned to the school level for which he has been certificated; (3) must retrain in order to meet the requirements of the new school level that he desires to enter, and (4) can receive permanent certification only when he has the same quantity of training as all the others.

Teacher Preparation Moves Forward

By RICHARD E. JAGGERS

A STUDY of teacher preparation in Kentucky completed in January, 1934, showed that there were practically enough certificated teachers with a minimum of two years of college training to fill the positions in the public schools.

Not all of the persons with training at this level and above were employed in the schools. On the other hand, a large percentage of the positions in the elementary grades were filled by persons whose training fell below the two-year minimum. Persons who had been admitted to teaching at lower training levels were permitted to remain in their positions although many well trained teachers were thereby forced to remain without teaching positions.

The study indicated that by Sept. 1, 1935, there would have become available a sufficient number of teachers who had reached a reasonable level of training to staff all the classrooms in the state. With the knowledge of this fact at hand the legislature in 1934 adopted a new school code, which included provisions necessary for establishing and maintaining a well trained and adequate teaching

and administrative staff for the schools. These laws became effective on Sept. 1, 1935.

The law provides for a minimum of two years of training before the lowest type of certificate is issued. The fact that there has been an actual shortage of trained elementary teachers made it both necessary and desirable to set the minimum amount of training at two years for elementary teachers. For high school teachers and supervisors the minimum amount of training was fixed at four years. A certificate for teaching at any level or certificates in administration and supervision will not be extended for life until holders have had equal amounts of training. The highest types of certificates for all levels are based upon completion of one year of graduate work.

The quality of training enters into the certification of teachers, under the new laws, from three angles: (1) elementary certificates are valid only for teaching at the elementary school level, and high school certificates are valid only for teaching at the high school level; (2) certificates at each school level are issued only to persons



A busy corner of a first grade room.

Teaching Typing in the Grades

By RALPH HAEFNER

typing, as they now do handwriting or drawing.

But what aims should underlie typing instruction for younger children? Should the main objective be speed and accuracy, as at present in the high school? Or should typing in the elementary school seek to equip children with a means of more easily acquiring the skills basic to reading, spelling and arithmetic, and more fully comprehending the content of the social studies, natural sciences and even the arts?

Again, what methods are appropri-

BOTH careful research and informal observation have demonstrated the favorable effects of the typewriter on important educational activities: reading, written composition and arithmetic. Consequently, use of the machine by young

children, especially in the home, has grown steadily for several years. And the day is probably not far off when many elementary schools will provide their pupils with the educational advantages inherent in the typewriter. The lower schools will then teach



The fifth grade is engrossed in story composition.



Kindergarten children writing their names or a few common words. The letter to Santa is by a second grade pupil.

ate for teaching children the use of the typewriter? Should the touch system, now employed in secondary schools, become the instructional vehicle? Should children be permitted to type with complete freedom from formal guidance? Does a system of teaching need to contain artificial devices to stimulate children's interest in typing?

Obviously, detailed answers to these questions would require lengthy discussion. However, the fundamental phases of the problem can be sketched in a brief space.

Heretofore, typing has been taught almost exclusively at the secondary school level. The economic urge of the pupils has determined the aims of the instruction—production of vocational skill. And their physical and mental maturity has fitted them for the touch typing method.

The touch system aims to produce a maximum of speed and accuracy in operating the typewriter. To this end, pupils are trained to strike the keys by "touch" rather than with the guidance of the eyes. Rate of typing is further increased by complete mechanization of all auxiliary operations, such as insertion of paper and return of the carriage. Elaborate sets of formal exercises, requiring long and rigorous practice, are used to attain the desired degree of skill.

For many years the touch system has proved its effectiveness for teaching typing to high school pupils. Why then should it not be adopted for use in the elementary school? First, the lower school is not concerned with producing finished vocational skills, leaving such training to the high school and college. Rather it seeks to prepare children for successful social

Dear Santa Claus.

I want a pair of ice
Skates, and a Bicycle for Christmas.
My Brother Billy Wants a Bicycle to.
Billy is three years old.
And I am seven years old.
I am going to Hang my stocking
I hope you are going to fill it.

living by providing a broad equipment of knowledge, attitudes and habits, among which may well be a moderate degree of typing skill.

Furthermore, elementary school children are not adults, either physically or mentally, as many high school pupils are. Throughout the lower school, pupils are rapidly growing and changing. In the primary grades they are not equal to protracted bodily and nervous efforts and are less able to adapt themselves to tasks requiring fine movements than to those calling for gross ones. In the intermediate grades, too, from

the fourth through the sixth, adult physical strains and attention spans are still beyond the resources of most children.

As children progress through the elementary school, their bodies develop and their muscular adjustments become more and more precise—in handwriting, drawing and industrial arts. Similarly, mental growth enables them to attend for longer periods to the complexities of social studies and science. But none of these elementary school activities are judged by secondary school standards.

By the same reasoning, elementary school typing must be suited to children at that level. Use of the machine must be adjusted to the condition that lower school pupils are immature physically, psychologically and socially. No values will derive from setting up typing standards of "correctness" based on achievements of high school pupils.

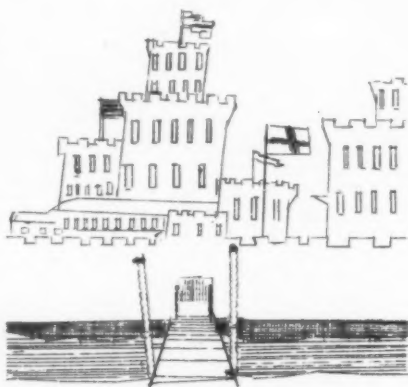
How then should typing instruction be organized in the elementary school? In general, the activity must be viewed both as a method and as a curriculum problem, just as are reading, arithmetic and social studies. Typing as a complex operation must be analyzed, as handwriting has been, and interpreted in terms of the learners' abilities at various maturity levels. In addition, typing needs to be so taught as to promote children's mastery of such important activities as reading, composition and spelling, rather than merely to develop as an interesting but isolated skill.

What Second Graders Can Do

In the first two grades typing methods should parallel in simplicity and concreteness those of handwriting and drawing. Children of those grades can be taught to hold the paper in the left hand and insert it by turning the knob with the right hand. They can learn to return the carriage with the left hand and space between words with the right thumb. They can shift the carriage with either hand, depending on the capital letter being written. Thus performed, these operations are all "correctly" done, but

with the slowness and clumsiness characteristic of little children's movements. In addition, many first and second graders, during spontaneous experimentation with the typewriter, will discover and use a number of the other special devices, such as the shift lock and the backspacer.

In keyboard operation concessions must be made to first and second grade children. They can learn to use both hands on the proper sides of the typewriter, rather than the dominant one for all letters. But their hands are too small to reach the various keys from a set "home" position. Furthermore, only their index fingers usu-



A sixth grader's typed drawing to illustrate a history booklet.

ally have sufficient strength to strike the keys without strain.

But even using the typewriter in the manner just indicated, little children will engage enthusiastically in a wide variety of valuable educational activities. They will type words, phrases and short sentences which they have already learned to read. Letters and invitations will be composed and copied. Names will be written a great many times. Numerals will be typed, paralleling development of counting.

Third grade children can use both first and second fingers, dividing each side of the keyboard about equally between the two fingers. Thus they employ correct fingering—as understood in touch typing—on more than 65 per cent of the keys. In addition, they can perform correctly all non-keyboard operations—insertion of paper, returning the carriage and inter-

word spacing. Third grade children can also operate special devices.

Third graders eagerly use the typewriter for an endless number of purposes. The machine enlivens drill on arithmetical fundamentals. Spelling practice receives new motivation. The typewriter stimulates composition of original stories, letters and poems.

One Step From Touch Typing

Children of the fourth, fifth and sixth grades become adept in using the typewriter's special devices. They operate the backspacer, margin release and paper straightener with the matter-of-factness attending use of a reference book. At least by the sixth grade they can employ all fingers on the correct keys.

The difficulty of the final step to touch typing has not been experimentally determined. But individual children in fair numbers, after three or four years of systematic typing, have been observed spontaneously operating by touch. Often for minutes at a time, they do not watch the keyboard.

The main issues in typing methods for the elementary school may be briefly summarized. Experience has shown that the instructional scheme needs no extrinsic interest devices at any grade level. Most children are quick to respond to the typewriter as an ingenious mechanism and are eager to use it for the basic purpose it serves—a means of rapid, clear and easy writing.

Second, it may be asserted that purely random typing—"hunt and peck"—is unnecessary in the elementary school. Well conceived practice materials, possessing intrinsic educational values, will enable young children to acquire a substantial mastery of the fundamental typing skills.

Finally, elementary school children can acquire a set of typing habits that will provide an adequate basis for any later systematic use of the machine. But an approach to touch technique should be considered the top of the instructional staircase. Many need not make the entire ascent, their personal typing requirements being satisfied by a moderate degree of skill.

Two Major Issues in State Administration

By M. M. CHAMBERS

PUBLIC educational agencies, to narrow the term somewhat arbitrarily, include only those institutions and departments of the state whose functions are wholly or largely educational. This excludes private schools and colleges and such agencies as the daily and weekly press, the motion picture, radio and television, insofar as they are under private control. To be sure, the last named mediums of transmission are to some extent, and increasingly, used by the public educational agencies, and there is no question but what the regulation of their use by private individuals or corporations is an important state function. However, for the moment we are concerned not with the regulation of private agencies but with the place of existing public agencies in state government.

Variety of State Agencies

Each state maintains from one to a dozen and a half state institutions of higher education, as well as numerous state institutions for the special education of handicapped persons, such as the deaf and hard of hearing, the blind and partially seeing, the mentally defective and the socially maladjusted. There are other state institutions for the mentally diseased and epileptic and for adult criminals in which education does or should play a large part in the institutional program but in which mere custodial restraint and medical treatment also necessarily loom large.

Other state agencies whose functions are clearly and wholly educational include state libraries and

library extension services, state museums and historical commissions.

In the center of the picture every state has a chief state school officer, and in some forty-two states there is a state board of education, a quasi-legislative body of widely varying powers bearing a variety of relations to the chief state school officer—one extreme being in a few states in which the two are largely independent of each other and possess an illogical and anomalous division of power, and the other extreme being in a few states in which the board appoints and removes the chief school officer at its pleasure and uses him as its chief or sole executive agent.

Spearhead of School Services

Clustered around this core of the state department of education, sometimes almost wholly independent of it and in other instances assimilated as a part of it, are numerous auxiliary educational agencies, such as the authorities administering vocational education, teacher certification, teacher retirement and textbook selection and purchasing. In addition, some states have special coordinating boards, particularly in the field of higher education; and every state has a numerous congeries of boards set up to examine and license aspirants to practice various professions and occupations, a function that is clearly educational in nature.

Often these numerous boards are wholly independent, but there is a salutary tendency to center their operations in a special division of the department of education, where all

may be served by an expert executive secretary who is a member of the department staff. Thus it is that the subordinate staff of the chief state school officer varies from a mere handful of clerks and stenographers in some states to a well planned organization numbering more than 800 professional and clerical employees in New York State. We must pass over questions relating to the detailed organization of this staff and confine our view to a few larger aspects of the place of educational agencies in state government.

In varying degrees in different states, the picture is generally one of numerous uncoordinated agencies, often unaware of their own kinship, or regarding each other with ill-concealed hostility, or actually trying overtly or covertly to discredit and destroy one another. By what means and to what extent should state educational agencies be organized in a single major department of the state?

We have all observed a long-time trend toward strengthening and expanding the scope of the state department of education. There is no space here to detail the progress of this trend in each state or even in one state. Suffice it to say that the trend still has far to go before effective unification of public educational forces is attained.

Structure of State Department

A few illustrations will suffice. In two-thirds of the states the state department of education has no direct control over the state library, and in less than half a dozen states has it any direct control over the state university. Often it does not control the institutions for the special education of defectives and delinquents, and

only seldom does it administer professional and occupational licensing other than for teaching.

Assuming that the coordination and coalescing of educational arms of the state government will continue, what should be the form of the chief state educational agency? On this point there is wide agreement to the effect that a lay board of representative citizens, chosen for long and overlapping terms and invested with quasi-legislative and quasi-judicial power over the state educational system, is the proper form of the agency that should be entrusted with the educational function of the state. It is also generally concluded that this board should appoint and remove the chief state educational-administrative officer at its pleasure, provided that it must choose for this post a person of high academic and professional attainments. The board should also appoint, upon the recommendation of this officer, the heads of the several divisions and institutions comprising the state educational system.

Far Short of Goal

How far we are short of achieving this arrangement may be briefly indicated by the fact that six states have no state board of education: one has a board that is merely advisory, and one reverses the picture by having a board that is appointed by the chief state school officer. In eight states only is the chief state educational officer appointed by the board. In thirty-two states he is still chosen by popular election, a method that is little less than ludicrous when used to fill a post requiring professional competency as its prime requisite. In eight states this officer is appointed by the governor, and experience shows that political potency often counts more heavily than professional eminence in such cases, and that the tenure is likely to be subject to every shift in partisan fortunes.

One significant obstacle tending to prevent the development of a coordinated state educational administration is the fact that in many states

the chief state school officer has often if not usually been a person egregiously lacking the academic attainment and professional achievement necessary to command the confidence and respect of all educational institutions and divisions of the state government. Reform in the selection and tenure of this officer is a prime prerequisite to progress toward an inclusive and harmonious state educational-administrative organization able to plan educational policy with the needs of the people as a whole superordinated to the special claims of local interests and individual institutions.

Relation to Fiscal Agencies

It now behooves us to regard briefly the relationships of state educational agencies to other arms of the government. By all odds the most significant item in this area is the control that the central fiscal authorities of the state have come to exercise over the educational agencies, by means of their power to interfere in the details of budget-making and other fiscal processes.

State superintendents of education and the presidents of state universities and colleges labor for months to prepare a detailed budget for the ensuing fiscal period, and after having it approved by their respective lay governing boards, find it arbitrarily mutilated by a state budget director who serves at the pleasure of the governor and who seldom has had any experience that would give him even an elementary knowledge of educational administration. His position requires him to pass upon the claims of scores of other diverse state agencies, and he tends to regard public education as only one among many hungry services, whose claims it is his duty to discount.

A central budget authority for all state educational institutions and departments would probably be desirable, but this authority should be professionally expert in educational administration and should have no responsibilities except within the educational arm of the state. It is too

much to assume that any one officer can possess the range of expert knowledge that would justify his power to interfere in the details of the budget-making of all state departments. Advising the legislature regarding the division of the total available state income among the major public services, without descending to interference with details, is another matter, and may well be done by the governor or his representative. But decision as to how much of each year's income shall go for education as compared with highways or other state services is a legislative function of the highest rank and ought not to be delegated in any degree.

Nationwide studies are needed to disclose to what extent in each state the short-term political executive or his political appointees are authorized to meddle in the detailed work of educational budget-making, and to what extent their ill-qualified interference in the details of educational administration actually produces waste instead of economy and efficiency.

Greatest Error in State Government?

It may be that the separation of detailed fiscal control from educational control is the greatest error of this generation in state government. On every hand there is evidence that it enables politically appointed fiscal officers to checkmate and disorganize carefully prepared educational plans made by competent and devoted educational administrators and approved by lay governing boards.

In this paper an attempt has been made to suggest only two major issues in state educational-administrative organization: (1) to what extent do we have and should we have internal unity in state educational administration, and (2) to what extent should the educational arm of the state be free from interference in its detailed financial administration by noneducational fiscal authorities? Each of these issues arises from an important current and recent trend in state administration. Investigation of each on a nationwide scale is urgently needed.

Design for Curriculum

By H. N. McCLELLAN

IF THE American secondary school is to continue to justify the faith of the people in their "great investment," its curriculum must undergo fundamental reorganization. Criticism of our present principles and practices is well-nigh universal and comes alike from the ranks of professional educators and from laymen who question the effectiveness of our program. Reconstruction of the secondary school curriculum must proceed along sound, constructive lines and must be based upon sound educational principles.

A Series of Operative Principles

In an effort to formulate such a program for the development of secondary education in Berkeley, the curriculum council, composed of the superintendent of schools, secondary school administrators and the curriculum director, with consultant service from the University of California and the state department of education, last year formulated a series of "operative principles" for the administration of the curriculum of the secondary schools.

The principles lay no claim to originality or completeness. They have been formulated as a working basis for the development of a progressive program of secondary education in Berkeley, and will no doubt be modified both in statement and in application as a result of experience.

These principles, with slight modifications pertaining to purely local practices, are divided into three groups: those pertaining to secondary education as a whole, to the junior and to the senior high school.

The period of secondary education extends from the beginning of the

junior high school, or the seventh grade, to the end of the junior college, or fourteenth grade and includes all pupils of adolescent age.

1. Secondary schools should provide courses suitable to the needs, interests and capacities of all pupils enrolled, offering a program of studies which include curricular and extra-curricular activities and providing a program of guidance for all pupils.

2. In the junior high school the program of studies should be organized as a uniform curriculum which provides a series of common experiences for all pupils, supplemented by electives in the ninth year. In the senior high school the program of studies should be organized as a series of parallel curriculums with constants, variables and free electives. These parallel curriculums should be further differentiated and specialized in the junior college.

3. Instruction in the various subject-matter fields should take account of the individual differences of the pupils and should be adapted to their needs, interests and capacities.

Guidance as a Unified Service

4. Guidance and counseling must be a unified educational service taking the whole child into consideration at all times. It should include health, curriculum, vocational, social and ethical guidance; use of the case method or study of the individual pupil; administrative provision for group guidance by means of exploratory courses; provision for individual differences, and opportunities to explore interests and aptitudes. Its procedures should be informational and suggestive, rather than selective and determinative in nature.

The secondary school curriculum must take cognizance of the pupils' need for learning today what he must live tomorrow. Operating principles for administering such a curriculum have been worked out in the Berkeley public schools.

5. The subject-matter fields to be included in a comprehensive program of secondary education are English, social studies, mathematics, physical and biological sciences, foreign languages, fine arts, practical arts, vocational arts, health and physical education. The program of secondary education should also provide for participation in social activities.

For Better Living in the Present

6. The importance of subject matter in attaining the objectives of education is recognized. Through mastery of subject matter the pupil appropriates for himself the achievements of the race and acquires the tools and techniques of living and learning in the present. Secondary education, however, is for life today as well as in the future, and subject matter should be used for the contribution that it makes to better living and better life adjustments in the present. The rigid organization of subject matter into separate compartments of knowledge conceived as independent, logical categories is contrary to the integrated thinking that real life requires.

7. Development of pupils can best be accomplished by means of subject

matter which is designed to explore the interests, aptitudes and capacities of the pupils, and reveal to them the possibilities in higher phases of activities. Materials should be selected for the values to be derived from their study and not for the sole purpose of preparing the pupils for the work of the next grade or grade level.

8. Experimental evidence indicates that habits, methods, ideals and generalizations built up in one field of knowledge or abilities may result in either increased or decreased ability in other fields; therefore all learning should be made as specific as possible and when transfer is desired, specific content, efforts and methods should be used to promote such transfer. No subject should be regarded as having *per se* greater mental training value than another and consequently as having special claim to consideration in the program of studies for all pupils.

9. Evidence from the psychology of learning and individual differences supports the theory of gradual and concomitant development of mental traits. The program of studies should present a continuous and correlated arrangement of learning experiences giving the pupil opportunity for continuous enlargement of knowledge, skills and attitudes growing out of experiences in the various subject-matter fields.

Use of Class Periods

10. The purpose of the class period is to provide for the acquisition of knowledge, skills, attitudes and mental techniques and their application in the solution of problems. The period should be considered primarily as a learning period during which the pupil supplements and organizes knowledge and skill previously gained; acquires new knowledge and skill; learns methods of effective study; experiments, investigates, discusses, criticizes; develops self-control and independence; acquires new attitudes and appreciations, and learns to apply these acquisitions to the solution of problems under the direction and leadership of the teacher.

11. Learning is an active process and depends for its effectiveness upon breadth and richness of experiences on the part of the pupil. It should be stimulated by enlisting the active effort of the pupil in selecting, planning and determining the outcomes of desirable performance. These learning experiences should be recognized or accepted by the pupil as being worth while because they concern him and others in a vital way.

12. The assignment of home work should be carefully planned for the purpose of instruction in the use of leisure time, the development of methods of independent study and the satisfaction of pupils' interests. Home work should be assigned in such a way as to make a place for other home activities.

Value of the Shared Life

13. Prescribed courses should be organized to fit the ability of the various groups. Methods and materials of instruction should be suited to the varying abilities of the pupils and be so administered as to ensure the greatest possible measure of success upon the part of pupils.

14. The pattern of democracy should be exhibited in the methods which the secondary school uses for its administration. Pupils should have as much responsibility for the conduct of their own affairs as they are able to bear. Schools should exhibit the value of the shared life in which each pupil takes his part without fear or favor.

15. A recognition of the rights of the individual pupil, respect for his personality and a recognition of the importance of success are fundamental to the proper development of secondary school pupils. The schools should recognize that there are some things which every normal person can do well. By counseling it should help the pupil to find what those things are and by guidance and proper training it should help him prepare to do them well, teaching him the habit of success rather than the habit of failure.

Schools should teach pupils to face

facts squarely and frankly without undue elation in success or morbid depression in failure. It is of primary importance for pupils to form the habit of success. They should recognize that success is attained by the individual in following lines of work for which he is adapted and by making effort appropriate to his abilities. The rôle of failure in pointing out one's limitations or as the price of the violation of some essential condition of success should be recognized in guidance.

16. The love of adventure is one of the distinguishing characteristics of adolescence. The secondary school should afford opportunity for adventure by means of vigorous games and sports, opportunities for high thinking and the courage involved in maintaining worthy moral and spiritual standards. Through study of individual differences and through the application of a wise program of guidance the school should make life so vivid, so real, so inspiring that the full force of young manhood and young womanhood will be expended in constructive endeavor.

17. The impulse to create is strong from early childhood. To ignore this impulse during the period of secondary education is to do violence to the nature of youth. The school should recognize and give opportunity for the expression of this impulse through manual, social and intellectual activities which will stimulate the creative energies of youth and direct them into constructive channels.

In the Junior High School

The pupil's first years in the junior high school should aid him to make adjustment to the new school organization and to explore, under guidance, the main fields of human activity.

1. There should be provision for a gradual transition from the grade teacher organization of the elementary school into the departmental organization of the junior high school.

2. The program of studies in the junior high school should be organized as a series of prescribed expos-

ures to the principal fields of human activity. This should be accomplished by means of a uniform curriculum in the seventh and eighth grades with limited election in the ninth grade.

3. In the seventh and eighth grades there should be required exposure to the principal fields of human knowledge by means of prescribed learning activities in English, social studies, health and physical education, mathematics, physical and biological science, fine arts and practical arts. The junior high school program should also include the social activities of the school, such as assemblies, clubs, publications and other organizations.

4. The program of studies of the junior high school should be organized as a well integrated three-year cycle for the purpose of giving general education and not vocational or specialized training.

In the Senior High School

The senior high school should provide increasing opportunities for differentiation and specialization, the integrating and exploratory functions operating to contribute to the process of selection and specialization.

1. The program of studies of the senior high school should consist of a series of parallel curriculums, the courses in the various curriculums being organized as constants, variables and free electives. Constants are those courses or subjects that are necessary for all pupils in every curriculum; variables, for some particular activity within the curriculum, and electives to round out a pupil's experiences, furnish enjoyment or remove deficiencies.

2. The following constants or essential elements should be included in all curriculums: (a) continuous daily instruction in health and physical education throughout the three years of the senior high school; (b) continuous and cumulative instruction in the social studies, including citizenship, American history and government, and problems concerned with the social institutions, economic, political, civic and cultural life of the American people; (c) instruction in

English leading to satisfactory mastery of oral and written English as a medium of expression and communication, and a knowledge and appreciation of literature as a means of personal development and leisure time enjoyment, and (d) one year of laboratory science.

3. Within each curriculum there should be offered systematically arranged variables to provide for particularized needs to make possible the attainment of the goal set for the curriculum.

4. Each curriculum should be organized to allow election of some subjects or courses which make a special appeal to the individual pupil and are taken to furnish enjoyment or to remove deficiencies.

5. Courses classified as constants are presumed to be of common worth to everyone. They must be valuable in themselves as well as preparatory, and should therefore contain material not alone preparatory in nature but of present and immediate general

worth, capable of functioning in the present life of the pupils and of universal and continuing application. Especial attention should be given in these courses to the adaptation of content and method to the varying needs, interests and capacities of pupils.

Variables should be organized to provide experiences in the necessary knowledges, skills and attitudes that will make progress in a particular direction possible. They should be considered primarily as tool subjects and should not be encumbered with material or purposes other than those that contribute immediately and directly to the special goal. They should present only such material as is necessary to accomplish preparation for the particular end sought.

Electives should provide a wide choice of material that makes some individual appeal. They should provide opportunity for the exercise of special interests and aptitudes and for the enrichment of the program.

Testing the School Pupil

A STUDY of tests and measurements in Minnesota schools by a committee of the council of school executives of which T. J. Berning, state department of education, was chairman, resulted in the following conclusions published in the *Minnesota Journal of Education*.

Diagnostic tests, it was decided, are the most important types of tests if properly used, while achievement tests should be emphasized more than they have been in the past. There is a definite place for the essay type of examination based on the course of study. These furnish training for the pupils while testing them, and the technique of their administration should be improved.

A program of standardized examinations reaching as far down as the third grade should be inaugurated, with three or four tests given each year. In this way all major subjects

could be tested every few years. The committee approved of the desirability of state board examinations but were opposed to drilling or coaching for them, maintaining that this defeated the tests. It was also suggested that the practice of publishing old state board examinations be discontinued.

The committee also suggested that a considerable amount of research should be devoted to the validation of test items, and emphasized that no test can be used as a measure of absolute ability. On the other hand, they can be used as a supervisory procedure to measure what has been taught and how well, and to spur teacher and pupil to better learning and better results. A complete record of tests for all children from grades one to twelve should be kept and made available to teachers for guidance purposes.



Pictures Are Easy to "Read"

By HEROLD C. HUNT

FOR years education has been depicted in pageant form as a maiden with a wreath of knowledge on her classic brow, garbed in trailing robes of pure white, carrying a lighted candle in one hand, groping her way into a mystic future. A hushed silence falls over the audience as this ethereal creature pauses for a

moment in her gropings and explains in ageless tones that she holds the key to the future. Her followers only will find themselves inside the gate of opportunity.

Just why knowledge surmounts only classic brows, why robes must be white and trail, and why a candle should light the future still remains

The average person likes to look at pictures because for him they are the quickest means of communicating real situations. This superintendent allows pictures to interpret the school system to the public in his annual report.

a question but as a tradition try to eradicate it. Perhaps it should not be eradicated; perhaps it should only be translated into a picture of education today. Instead of one maiden speaking in the voice of ages, today's picture of education would show thousands of children dressed in silk, cotton or denim with faces characterized by purpose—not groping their way across the stage but walking determinedly into the future, not fearful but sure that they are equipped for the problems they must meet.

If this is the way school children today are prepared for the future, is it not time that every community and every state should be aware of the fact! The question is purely rhetorical for so much is being said and written about the schools and the community that the public schools would appear to be the community's chief institutional interest.

To the superintendent then fall the problems of translating this changing picture of education, and in casting about for a suitable medium he may by chance seize upon the annual report as an opportunity effectively to summarize and present all the phases of school life. The utilization of the annual report for this purpose is natural and commendable: natural, because the legal necessity for the publishing of the actions taken at board meetings, together with the financial statement for the year has long been required or traditional, and commendable because it affords an opportunity to bring to the home, in an informal manner, information with regard to the work

of the schools, their costs and the educational needs of the system.

Unfortunately, however, had the printer kept his forms from year to year much of the costs entailed in producing these reports might have been saved, for so great was their similarity that the "Annual Report of the Superintendent for the Year 1901" needed only to be changed that it might read, "Annual Report of the Superintendent for the Year 1914."

Schools an Economic Target

Obviously such reports soon lost the interest of a public that was finding itself being rushed headlong into a world on fire with industrial, scientific and social changes. Schools were taken for granted. Education remained snugly inside the home it had built for itself and watched, serenely, at first, the mad but merry pace set by its competitors. And

what competitors they turned out to be!

The story of that race is not necessary here. But when it was over, temporarily at least, interest began to be evidenced in the schools.

As the economic target of a fearful or embittered public the schools found themselves reevaluating the traditional faith of their educational and social scope in an effort to regain public favor.

Many forces were put into operation to induce public support of the modern school, and once more the annual report of the superintendent presents itself—urging that it be given consideration and the opportunity to develop many of its latent possibilities.

The problem of any such report is to solve the difficulty of making taxpayers realize the ways in which their schools serve the community. Super-

intendents and boards of education have attempted, for many years, to meet this situation by presenting reports that had embodied in them an accumulated group of facts and statistics. The formal survey report serves an excellent purpose but educational publicity should always be directed to soliciting the best response from people. For the most part the typical reports tended to become, to the average citizen, a mass of uninteresting, uninspiring statistics.

Appealing to Variety of Persons

Most school systems are made up of a variety of people and many interests and the nature and extent of their interest in school matters are hard to determine. What may succeed in one place and time may fail in another. To meet this challenging situation, the schools of Kalamazoo set themselves the task of producing an





annual report that would prove of interest to every one of its patrons. Naturally then that important question arose — how is this to become an actuality rather than a theory?

Some pertinent facts came to our attention. As educators, we have talked unceasingly about education, its aims, ideals and accomplishments. Even during the past few turbulent years, we continued to talk of educational aims but to it was added the idea of education to meet a changing social order. The public remained apathetic. Beaten at so many games they saw little hope in the schools; in some cases they saw no hope for the schools of today. They did not understand

that the reading, writing and arithmetic of their days were still being taught, but as the child of today would understand them.

The solution to the problem then seemed to lie in a portrayal of these aims and ideals of which there was so much talk.

Happily the Kalamazoo schools for some time had been motivated by a definite philosophy of education, and their administration, supervision and teaching were based upon a conception that recognized and regarded education as a process of experiencing by which the child would learn to participate in life activities with increasing efficiency and satisfaction. Accordingly a pictured report was determined upon with this conception as its base.

An inventory made of the educational activity within the schools revealed both an endorsement and an achievement of the "nine goals of public education for Michigan" as formulated by the Michigan Educational Planning Commission in 1934, as six to ten attractive pictures on a double page gave evidence of life and interest in the particular goal that characterized "Cooperation," "Character Development," "Social Adjustability," "Fundamental Skills," "Health and Recreation," "Specialized Training" or "Adult Education." Other pictures included sketches of





the first school erected in 1863, its successor "Old Union" dedicated twenty-six years later, and a composite spread of all the buildings serving the 11,000 pupils today.

Thus a pictorial interpretation of the public schools was brought to the attention of the public. In spite of its enthusiastic reception, it is difficult to evaluate the outcome of such procedure specifically but the advantages of a pictured report are obvious. The average person likes to look at pictures because for him they are the quickest means of communicating real situations. Pictures are easy to "read."

In depicting the activities of the classroom the personal element has socializing effect on the actual facts of the situation. A picture of a classroom as such would mean to the

teacher or administrator no more than a column of statistics summing up the identical set of facts. For the parents and friends, the same classroom picture takes on a new and increased meaning.

Reports of former years were, to say the least, uninteresting and impersonal. Mr. and Mrs. Blank, for example, do not care whether the breakage in window panes in the school system as a whole is 4.9 per cent less than it was a year or even ten years ago. Neither are they particularly concerned in knowing how many new filing cabinets are being used in the office of one of the five junior high schools. They are, however, vitally interested in the work Johnny is doing by playing in the band, or how he can learn to read while indulging in his favorite scientific hobby. They have a vital interest in the improvement effected in little Mary's health by allowing her to participate in the correctional activities of the orthopedic room.

In presenting to the parents, to their neighbors and finally to any interested person in the community these and other features of the school system, the annual report can be made to serve an important function in heightening the community's appreciation for its own public schools.



Not a Business

By ARTHUR F. COREY

THE fate of the transitional school is not in the lap of the gods but is decidedly in the lap of the school administrator. Principals and superintendents control the processes which offer the greatest problems in any attempted reorganization in education.

The executive is constantly tempted to mechanize and systematize for efficiency and smoothness of operation. One superintendent remarks frequently that his work is done before school begins in the fall, and after he has set up the machinery the schools could well operate without him.

System and efficiency are truly desirable, but most of the so-called efficiency in education is judged on big business and industrial standards. The concept that education is big business has been seriously overworked. Education is not a business. In business everything, including the quality of the product, is subordinate to profit. In education everything, including the cost, is subordinate to the quality of the product.

Education Differs From Business

School administration in the past has been content to build an educational structure and then assume that supervisors and teachers could plan the educational experiences for the children. Principals and superintendents should study philosophy before undertaking their labors in finance and organization. Too often, the cart has been pulling the horse.

The democracy we so loquaciously profess in our political institutions must be given larger function in education. School programs must somehow be made to fit human needs, instead of personal resources being

forced into the pattern or mold of a predetermined educational design. The selective character of the public school must be deleted to permit all children to profit by educational experiences from the beginning to the end of the system. Education must interpret material forces and things in terms of human values. More attention must be given to citizenship.

Six Common Problems

Many plans are being pushed by enthusiastic sponsors to accomplish the objectives that have been suggested. Without attempting to evaluate or even discuss these schemes, it is pertinent to point out that certain problems are common to them all.

1. Training of teachers in service is the gravest issue in any plan of school reorganization. Changes cannot be made by teachers who do not understand, appreciate or believe in the thing they are doing. Teachers must be educated on the job to make any educational reformation successful. This task is the administrator's.

2. Library service will of necessity be made more available to the individual child. This trend has been popularly called "decentralization of the library," but in utility the question is merely that of somehow bringing pupils and books closer together. The details of this accomplishment are administrative in character.

3. School supplies must be more plentiful. There must be provided for teacher and pupil a breadth of supply materials undreamed of in the traditional school. These supplies must be administered in such a manner that no waste is permitted, but with sufficient ease, speed and freedom from red tape for the teacher that she

does not do without the material or buy it herself rather than go through the technical details of requisitioning.

4. Specialized school equipment must be made to serve the whole school rather than being the exclusive property of a department or special teacher. Pianos, woodworking tools, radios, gymnasium equipment, laboratory devices, sewing machines, flat irons, lumber and a myriad of other articles, commonly guarded carefully by certain specialized individuals in the school, must be made available in any course where their use can contribute to the educational effectiveness of the experience of the group. Responsibility for equipment must be assumed when opportunity for its use is accepted by the teacher and pupils involved. The organization of a plan to achieve this service is an administrative responsibility.

5. Subject matter teachers in some rather well established fields may find serious difficulty in adjusting their activities to a philosophy that judges curricular material by its contribution to social effectiveness and abundant living. These curricular adjustments are not merely course of study manipulations, but personnel enigmas of the gravest sort.

6. Public relations of the highest type must precede and accompany all educational reorganization. This is a program that must be directed by the administrator.

Teacher Needs Leadership

The problems outlined here are the obvious and accepted ones. They are not suggested as either original or final but to emphasize the factor that administrators must play in reorganization.

The leadership of the administrative group in educational affairs is vociferously decried, but is a reality that must be faced. The teacher must find in her administrator a sound progressive philosophy, a cooperative attitude and a willingness to provide a framework for educational progress.

Marking Pupils on Their Working Ability

By A. ELWOOD ADAMS

MARKING and promoting pupils have long been the despair of teachers. Many practices prevail in elementary schools. The problem is complicated by the fact that marks usually represent the teacher's subjective judgment, and that a great diversity of factors is considered when a mark is determined.

The situation of pupil marks has become so critical that teachers often doubt the wisdom of devoting valuable teaching time to such an unsatisfactory procedure. Nevertheless, one has only to visit the school at the time marks are distributed to realize the importance of the occasion to the pupils as well as to parents.

Purposes of Grades

Many persons feel that grades as commonly determined in American schools fail to achieve fully the purposes for which they were intended. Briefly, these grades should have the following purposes:

1. To indicate to pupils and parents the quality of the work done.
2. To stimulate improvement in the work of pupils.
3. To enable the home and school to work more effectively on their common problem of education.

Much of the confusion over the interpretation of school marks is due to the fact that a great many systems of marking are in use. Recently the U. S. Office of Education conducted a thorough study of provisions for individual differences, marking and promotion in American secondary schools. In presenting the findings of the investigation Roy O. Billett says, "Counting minor variations 100 different marking systems are in use in

the 258 schools selected for study."¹ Probably to a lesser degree, but of considerable significance are the various methods of grading and promoting in elementary schools.

The position taken in this article is not that marks should be discontinued, but rather the degree of accuracy with which they should be determined and the qualities on which they should be based. Too often, such factors as initiative, improvement, accuracy, neatness, endeavor, honesty and good intentions form the basis of a composite mark in a particular subject.

When determined from such a composite of qualities, the mark conveys little reliable information. Billett says, "If one had an accurate measure of a pupil's ability to do the work of a given subject-matter field and an accurate measure of his accomplishment in that field, he could derive mathematically a measure of the effective effort being expended by the pupil."² Symonds³ believes that the school mark should represent only achievement in the subject pursued.

Determining Pupil Achievement

If this point of view is accepted, how is the degree of achievement to be determined? Class standards might be set up for attainment, and a minimum score for promotion determined. If such a procedure were followed, all pupils would be required to leap the same hurdle regardless of ability,

health, home environment or emotional make-up. In addition, it would be difficult to determine objectively standards for the subject and the class. The result of such an organization would be far from satisfactory.

It has been possible to determine pupil-achievement in the various subjects on the basis of "individual working ability." Many schools assign marks in relation to pupil-intelligence as measured by standardized intelligence tests. This policy is undoubtedly a step in the right direction. However, it overlooks certain factors necessary to successful achievement in school. When pupil-intelligence alone is used as a basis for awarding school marks it is assumed that pupils start from "scratch" in all other particulars.

Allowing for Environment

This is certainly a false assumption because no two pupils in any one grade possess the same emotional, social and biologic characteristics.

One pupil comes from a home where study is possible and where every encouragement is given for his success. He has the ability to learn rapidly; he has good health; his previous teachers were strong, and he need not devote hours to work outside of school. Another pupil does not learn rapidly; he works after school hours; he is nervous and frequently absent from school, and his interest in school has been killed by an early succession of unfortunate school experiences. It is impossible for these two pupils to achieve the same even though they may be endowed with equal native intelligence.

¹Roy O. Billett, *Provisions for Individual Differences, Marking and Promotion*, United States Department of the Interior, Office of Education, Bulletin, 1932, No. 17, Monograph No. 13, p. 427.

²*Ibid.*, p. 430.

³Symonds, Percival M., *Measurement in Secondary Education*, 1929, p. 505.

TABLE I—GRADING INDEX USING THE DECILE METHOD

Pupil	Working Ability	Achievement	Difference	Grade
A	10	10	0	Satisfactory
B	10	9	-1	Satisfactory
C	9	10	+1	Satisfactory
D	8	5	-3	Unsatisfactory
E	8	8	0	Satisfactory
F	5	9	+4	Satisfactory

It appears desirable, therefore, not only to determine the achievement of pupils in a subject but also to establish an accurate measure of each pupil's ability to achieve in the particular subject. However, a pupil's ability to achieve in school subjects cannot be adequately determined from his score on group intelligence tests. Other influencing factors must be considered and removed from the subjective opinion of teachers and principal.

The following plan of marking and promoting consists of the determining of achievement in subject-matter fields and the relationship of such achievement to individual working ability as determined by (1) intelligence, (2) health and (3) environment. The plan consists briefly of the following steps:

1. To determine the pupil's "working ability" by the following means: (a) according to scores on standardized intelligence tests; (b) according to the teacher's estimate of the pupil's ability; (c) on the basis of health as determined by the school nurse or medical examinations; (d) on the basis of the type of home from which he comes as determined by home visits by the nurse, attendance officer and teacher; (e) by formulating a composite ranking embodying a, b, c and d, and (f) by transferring the composite ranking to a decile representation, thus awarding to each pupil a numerical designation that represents his "working ability."

2. To determine pupil accomplishment as follows: (a) by instructing the class along customary practices, the teacher giving frequent tests of an objective nature so that pupil accomplishment may be rather accurately determined; (b) by ranking

pupils on the basis of their accomplishment regardless of their intelligence, home conditions, health and teacher opinion of ability, and (c) by transferring the ranking to a decile representation so that each pupil may be represented by a number.

3. To determine the mark and promotion as follows: (a) by obtaining the difference between the decile representation of the pupil's "working ability" and the decile representation of his achievement, as shown in Table I, and (b) by transferring the difference into a grade of "satisfactory" or "unsatisfactory" as determined by the degree of difference.

Pupil A achieved to a degree com-

mensurate with his ability, as did pupils C, E, and F. Pupil B so nearly held his place in the class that his mark should probably be "satisfactory" also. Pupil D's achievement was not that which should be expected of one with his working ability; hence, his "unsatisfactory" mark.

While the system seems elaborate, in reality it was simply administered. Nearly all of the information necessary for determining the pupil's working ability was available in the principal's office, and most of the tabulation was done by the office staff. Teachers were thus enabled to devote their time to teaching and testing.

The real merit of the plan lies in the fact that it allows the slow pupil to compete with himself, not discouraged by frequent and ill deserved failure. Likewise, the more capable pupil feels the urge to work up to capacity. He is no longer compared with his less capable classmates, and probably for the first time in his school life he is challenged to the best performance of which he is capable.

Planning for the 1936 Graduation

THE movement to vitalize commencements has become widespread. Large numbers of the secondary schools of the country have abandoned the traditional exercises in favor of the "vitalized" program. The emphasis in such a program is upon the graduate. At the same time, it offers a unique opportunity for effective educational interpretation. This new type graduation program has met with the approval of administrators, patrons and pupils.

The purpose of the commencement packet, prepared annually by the National Education Association, is to assist schools in planning their programs. Graduation programs may well grow out of school activities or local, state and national issues bearing especially upon youth problems.

The 1936 packet emphasizes the

importance of the discussion of present-day problems, particularly those which the senior must face after leaving school. It suggests the theme "Looking Forward With Youth." No topic is more appropriate this season in view of the widespread interest in youth problems and the many projects under way to help young people solve their problem. The packet contains model programs, suggested procedures and materials with which to work.

A new feature in this year's packet is the writing project for graduating classes. The plan is for members of the class to write on the topic, "What My High School Has Done for Me," and to send the best three papers to the National Education Association. The best of the papers submitted will be published when the contest is over.

Economics in the Secondary School

By W. W. HAGGARD

THE depression has pushed the social sciences into the foreground of the secondary school curriculum. It is widely contended today, that, if economic understandings are given sufficient currency, possibly such extreme dislocations in our economic structure as we have endured the past few years can be prevented in the future or at least alleviated.

The one institution that can provide some measure of opportunity for large numbers to understand our economic system is the secondary school. It has been estimated recently that 70 per cent of the adolescents from fifteen to eighteen years of age are now enrolled in the secondary school. Its social opportunity is here as never before.

Intelligent citizenship in our social order necessitates economic insights, especially since government is constantly wrestling with economic problems. Walter Lippmann in his recent book, "This Method of Freedom," contends that government in this country for several decades has attempted to protect the standard of living. He submits further that there is no alternative for the government of the future. David Lawrence enumerated recently twelve new economic

ventures of the federal government of the last few years.

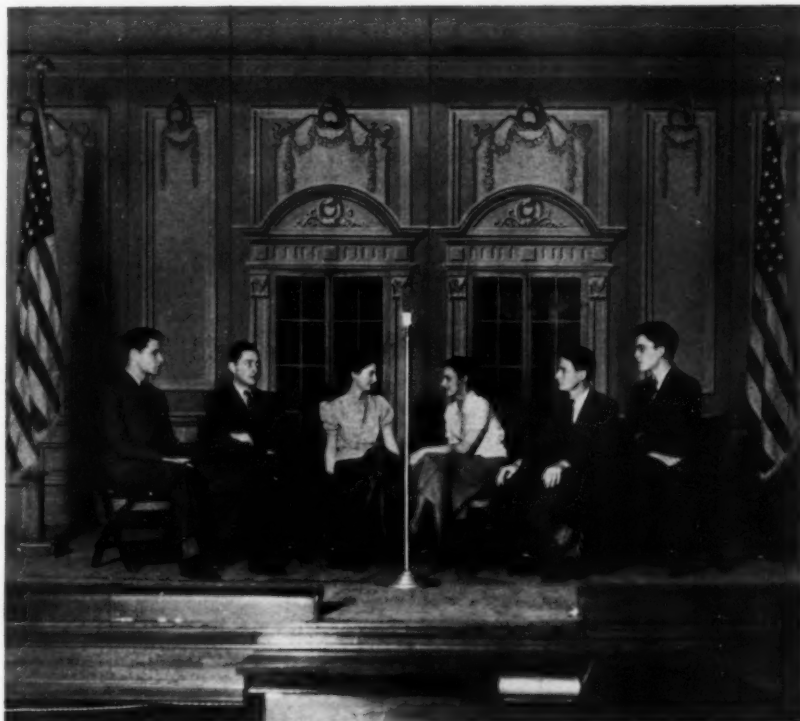
The dismal science of the past has become a vital science for the individual today who proposes to be an intelligent citizen. He must be able to see the fallacies of the extreme laissez faire point of view on the one hand and the haziness of Mr. Long's "Share the Wealth" idea on the other. He also must be able to see that the source of our illness is not entirely the monetary system as some would have us believe.

Some contend that it is impossible for anyone to understand our economic system. It is true that economists themselves are uncertain concerning many details of our system, but an understanding of the larger aspects of it is within reach of the great majority, according to H. G. Shields, assistant dean of the school

of commerce of the University of Chicago. Surely a better appreciation of the workings of the system on the part of more and more individuals is entirely within reach.

Economic education of a kind takes place around the dinner table at home, at the store, in the shop and in the office. The behavior of the majority of citizens indicates that much of this education is fallacious, however. A bill was introduced in a Midwestern state legislature recently to appoint a committee to make an *eight weeks'* study to determine what could be done to solve the problem of the depression. Economic myths are more prevalent than economic truths, even in the thinking of many professional people. Secretary Henry Wallace says that we must discontinue believing that two and two make six.

It may be assumed that if unsound



Six seniors discussing the gold clause decisions of the Supreme Court at the annual social science program of Joliet Township High School.

economic education is possible, sound economic education is possible, if we begin with the younger generation. If the secondary school fulfills its full obligation in the future, newspapers published to sell and radio addresses designed to mislead will disappear.

It is entirely appropriate to inquire into what the secondary schools are doing about this problem of economic illiteracy. Dr. W. I. Gooch of Teachers College after a survey made this statement in a discussion group at the meeting of the Department of Superintendence in Atlantic City.

"Economics as taught in the public schools emphasizes laws, principles and academic theory. It appears that the materials of instruction continue to be drawn largely from the field of classical economics, from the economics of Smith, of Ricardo and of Mill, as interpreted, adapted and expanded by economists of the late nineteenth and early twentieth centuries."

It goes without saying that this is not the approach in the secondary school, however valuable the historical aspect of this approach may be. What are some approaches to the improvement of our economic education?

First, teachers themselves must be better trained not only in the historical approach but in the actual workings of our economic system. The teacher too often is steeped in economic theory with all of its technical jargon and in daily life violates the sound rules of our economic life at every turn. We need teachers who are practical economists as well as theorists. We need, also, teachers who understand the relationship of psychology to economics. It may be said, however, that teachers are experiencing some practical lessons in economics. Necessity is forcing them to know more about taxation, money, management and budgets. Teacher-training institutions are earnestly attempting to find out what constitutes teacher education.

Second, teaching materials of a more vital nature must be prepared. The text in elementary economics has

been poorly adapted to the level of the learner. It has been too theoretical and abstract. The depression, however, has given an impetus to the preparation of textbooks and other teaching materials of a more practical nature.

There has just come to my desk some excellent material on the personal budget, the family budget, life insurance, investments, taxes, money, credit and the like. These topics suggest problems significant in our present day society and, also, problems that can be realistically developed. Certain commercial and household arts courses, as offered at present, contain valuable economics material. The same statement may be applied to such social science courses as citizenship and occupations.

Further progress in the preparation of curriculum materials bearing upon the economic order will be made during the next few years. Possibly history, economics, sociology and political science will be integrated as one course throughout the high school.

Third, our teaching methods must be more productive of analysts and thinkers among the secondary school

graduates in the future. The facts must be presented not with the thought of perpetuating all the status quo but with an open mind to desirable changes. Real teaching is not indoctrination; it is the stimulation of learning. Real teaching provides a situation in which youth is free to learn. Can one think of an area of our life in which the formulation of sound judgments is more needed than in economics? Possibly the teacher must begin with the pupil's immediate interests and proceed in a socialized manner and with a definite concern for the responsibility which the pupil will have in adult life, if our citizens are to become thinkers in the field of economics.

Concluding, it is submitted that there is great need for economic education among our citizens at large and that the secondary school is the institution to provide this training. But in order for the secondary school to accomplish this task, better trained teachers must be supplied, vital instructional material must be provided and teaching methods productive of sound thinking must be introduced on a scale that is considerably wider.

School Aid in Reducing Motor Accidents

By SIDNEY J. WILLIAMS

THE public schools should address themselves to serious safety training courses designed to avert the tragic automobile accidents that are occurring all around us.

The elementary schools have already done a splendid job in teaching safe pedestrianism. The high school's responsibility is to the beginning driver.

I suggest the following program:

1. Create a student safety council or committee.
2. Assign one of your most competent teachers to it, as faculty adviser.
3. Encourage all teachers to use safety material in courses.
4. Let this council develop a pro-

gram of contests, student news items, bulletin board posters and assembly room exercises.

5. If you can't start driver training courses get some lectures on traffic safety and driving rules by the best men you can find, from your families, police department, motor club officials or local safety councils. Especially ask for the cooperation of your state driver's license administration.

The National Safety Council wants you to be full partners in its entire campaign, the purpose of which is not only to save lives but to help work out the whole vital problem of co-operative living.

Understanding and Teaching the Atypical Child

By FREDERICK L. PATRY, M.D.

THE psychiatric approach to the education of the atypical child may be illustrated by the following anecdote:

"A young lady who had never seen a game of baseball attended one with her escort.

"Isn't that pitcher grand?" she said. 'He hits their bats no matter how they hold them!'"

Let us analyze this naïve expression of feminine intuitiveness for I feel that it holds the key to the common-sense approach to the philosophy, interpretation and treatment of what has been euphemistically referred to as the "atypical child." It is hoped that the reader will bear with this quasi-psychoanalytic attack on the nub of my thesis.

Teacher Must Be Open-Minded

"A young lady." Fortunately most teachers are young, but it is not merely a question of age, especially since one must be on his guard to distinguish the "apparent age" from the "life age" of women folk. This is a compliment and not a cynical reflection, for women oftentimes improve on Mother Nature. Teachers seek plasticity, flexibility, adventure and discovery bents in young people. Without these characteristics education is sterile. Especially in educating the atypical child, the teacher must be objective, open-minded and seek to learn from him how she may best unfold and organize his constructive potentialities.

Moreover, I am discussing "a" young lady. This is important since education at the kernel is essentially an interpersonality relationship between two individuals. There is no greater force in the educational proc-

ess than the impact of the teacher personality rhythm upon the highly sensitive, absorbing sponge-mirror of the child personality. Success in understanding and handling the atypical child primarily depends upon the teacher's understanding and handling of herself.

No mention need here be made of the significance of "lady." It is common knowledge that if we would develop "young ladies and gentlemen" we must set the pattern and treat children as such. Children are not small editions of adults; far from it. Rather should the teacher diligently seek to cultivate refined and cultural traits in children through radiating love, sympathy, understanding and respect for each "experiment of nature" no matter where he may lie on the curve of distribution.

"Who had never seen a game of baseball." In these United States it may be difficult to understand how a girl could grow up without seeing a baseball game or without having the emotional experience of "hitting a home run" or "being fanned out." On the other hand many a teacher is faced with the *de novo* experience of teaching atypical children with little or no special training for the job.

Various Types of Atypical Pupils

Fortunately departments of special education are more and more developing and offering well organized curriculums including adequate practice teaching for student-teachers with respect to various types of handicapped or atypical children — those with defective hearing or defective vision, those mentally retarded, the crippled,

those with low vitality or with speech and reading disabilities, those with cardiac disorders or epilepsy, the gifted — and, I might add, the average child with his normal problems and normal conflicts.

Teachers who have not had basic special training in educating the atypical child owe it to their educational integrity to reach out after opportunities for extension courses. Especially is this desirable these days since homogeneous groupings have been cut in upon by the armies of children landed at the school door-mat, to be educated and legally retained there until the age of sixteen or eighteen years, almost regardless of I. Q. or physical infirmity.

Must See Teaching as a Game

Since only 10 per cent of atypical children in the United States are being especially provided for educationally, each teacher on the firing line, especially in these times of financial stringency, must take a larger responsibility in translating human liabilities into community assets.

The important part of the foregoing clause to be analyzed is that teaching is essentially a game — a thrilling adventure in exploring largely unknown territory and latent resources. What adult recalling her child and adolescent group play life is not animated with eager and joyful anticipation of a game! We are at heart social beings, our pulses quickened and our spirits raised by bringing to a level of expression our instinct of play. The onus is upon the teacher to create the emotional atmosphere of the game of life ad-

justment in her daily classroom and extraclass opportunities.

"Attended one with her escort."

Every teacher is not only attending the educational game, but she is the second chief participator, and not a "bleacherite." She has paid her entrance fee in terms of time, money, hard work and merit on the basis of fitness for the game. Her escort is every child in her class. She must become "engaged" to every one of them through bonds of love for children and through capacity to put herself into their shoes, even though the shoes pinch or lack high heels or style. She must possess flexibility in interpersonality give-and-take, with a heavy sprinkling of compromise, and an itch to actualize in concrete living the optimum happiness and effectiveness of each participant moment by moment. Teachers must strike a chord of emotional harmony with each of their escorts in order to enjoy the game.

"Isn't that pitcher grand?" Can the teacher identify herself with this grand pitcher? Does she feel at ease in an atmosphere of such qualifying remarks? Has she any twitchings of undeserved acclaim? Of shortcomings or feelings of guilt? Even though modesty inhibits her from styling herself in terms of "grand," yet the desire for such a center-stage position is the forerunner of the actuality. Her own ingenuity and craving for self-improvement to the point of working hard for it are her best motivators.

Pupils Need Social Approval

"He hits their bats." Granted that one of our aims is to cultivate children to like the game of education, joyfully to anticipate and work for it, how important is it for the teacher as the pitcher so to throw the ball as to hit the bat? Is there any human being who does not want the joy of success and of social approval? Is there any better way of causing him to enjoy the game for its own sake, for its own inherent values, individual as well as social?

There would be a new era in edu-

cational history if every teacher could hit each pupil's bat! Who will venture to say that this is not the route par excellence to bring to optimum realization the happy socialized child, to prevent crippling attitudes, delinquency, crime, mental ill health, educational and vocational misfits, dependency, disharmonious social relationships and social inefficiency? Certainly if we as adults are going to "sell" baseball or education to children, their parents and the community, we as educators shall have to become more expert in cultivating in pupils habits of success and enjoyment in the digestion of school experiences and opportunities. Moreover, if we hope to iron out personality and behavior kinks, it will have to be through the route of pupil strengths, interests and enjoyment by shaping the school conditions so that satisfying achievement on each pupil's level of ability becomes the rule.

The Teacher's Personality

In the game of education it is not to the teacher's credit to throw trick balls with the result that the pupil "fans out." To keep children in the game the teacher must make her own personality, content and method so alluringly attractive that pupils will spontaneously become ardent fans of the school game. Thus negative personality traits and other undesirable and contagious attitudes and reactions on the part of the teacher will become eradicated through a thoroughgoing personality analysis and synthesis. This, ideally, should be done before the teacher begins radiating her example of the art of living wisely and well to impressionable childhood and youth.

"No matter how they hold them."

Does this mean that without trying or putting forth any effort in developing skill in hitting the ball the player should win the game? Not a bit of it.

The first fundamental principle in understanding human behavior is that every individual wants to succeed and win group recognition and reward. He will if the school shows him off to advantage on his own level of

ability to succeed. All attempts to win social recognition by vicarious and antisocial or asocial methods means that someone has blundered in recognizing constructive personality sparks and in fanning them into a glow of effective socialization.

The second fact to be accepted is that there are as many ways of holding the bat as there are individuals—the old story of individual differences which we must respect and treat.

Must Know Individual Pupils

The third principle to be recognized is that adequate effort will be made by the pupil just as soon as the conditions are optimum for the unfolding of pupil interests, appreciations and activities. It is the teacher's business to study and come to know each pupil so well that she can readily recognize the individual peculiarities of posture and rhythm, constitutional through inheritance, or acquired through multifarious environmental experiences and the adequacy or inadequacy of their digestion. She must get to know each of her flock so well that she can recognize his identity, especially his strengths, and not harp upon the vulnerable spots in his protective armor of traits. Her sizing up of performance should always be not on the basis of opinionated generalities or cold statistical standards but upon how the "experiment of nature" reacts at the specific time and under the specific circumstances. So much for our general psychobiologic approach, and it must be admitted that to change attitudes is the first step in changing methods.

Fortunately, expert help in the form of child guidance clinics and other types of community, state or private clinical facilities for diagnosing and treating atypical children is within the reach of the average teacher. Although all our teachers cannot be expected to become specialists in interpreting and handling the various types of handicapped children, they may intelligently cooperate with the specialist in remedying and especially in preventing these costly pupil deviations. To this end I should

like to urge all teachers to familiarize themselves through practice with the case-study method.¹ This will be helpful not only in understanding and in reconstructing behavior and personality maladjustments of the atypical child but also in dealing with the often forgotten average child who frequently has his problems.

The average child also needs to be studied from the standpoint of self-improvement to the optimum. This approach is needed for the gifted child who too often must hoe for himself rather than be cultivated to the full as one of the community's most precious potential assets in creative and leadership contributions. Although the educational job is not so simple as that of the agriculturist who can relatively easily eliminate his poor stock, the school must to the best of its ability educate all the children of all the people. Its job is to help each individual find his niche in this swiftly moving panorama of social and economic "new deals." We are living today in a new era that must be diligently cultivated without too much taking our hand from the plough.

A third device is called "Mental Hygiene Balance Charts."² This approach envisages each child in terms of assets and liabilities (subdivided into "modifiable" and "unmodifiable"), needs, activities (prescribed to fulfill specific needs) and results. This should be a cumulative study of each pupil, especially the socially maladjusted, throughout his entire school life. Only by such long-term critical studies can we hope to understand more about the factors that switch pupils off the track of normality. They will tell us how we may gain control of the factors shaping behavior and personality development and how we may enrich the life performance of the normal as well as of the gifted child.

¹A helpful pamphlet illustrating this device has been formulated by the author, entitled "Methodology in the Formulation of Mental Hygiene Case Studies." It is published by the University of the State of New York Press. ²This device is described and illustrated in "Mental Health: Its Principles and Practices" by Prof. Frank E. Howard and Dr. Frederick L. Patry, published by Harper & Brothers, New York, January, 1935.

The Teacher's Working Day

By STUART DEAN

IN THESE days of economic stress with its accompanying educational retrenchment there is often considerable controversy over whether or not public school teachers actually earn their money and whether or not they put in a full day's work, as compared with other professions.

Recently I conducted a questionnaire survey among the 500 public school teachers of Newton, Mass., to determine how long they work daily and what forms of work their daily duties take.

From the data returned composite school days were constructed for the typical teacher on each of the three school levels. The procedure employed in this was, briefly, to include all items that were reported as having been engaged in by 10 per cent of the teachers participating in the study, provided this was also equivalent to 20 per cent of the total number of teachers in each group. When the validity of each activity had been established upon this basis, the daily average times for each item were arranged in a scale and the median figure was taken.

Following are the composite school days for each level showing the activities engaged in and the time spent in each. The figures given are the median number of minutes.

Activity	Elem.	Jr. High	Sr. High
Instruction.....	267	248	228
Preparation.....	48	42	39
Correcting papers.....	24	37	58
Corridor duty.....	16	20	20
Subject matter help.....	16	36	39
Assembly prep.....	15	....	....
After-school class.....	15	24	24
Faculty meetings.....	12	6	....
Conf. with parents.....	10	6	18
Recording progress.....	9	15	14
Cards and forms.....	8	12	10
Register work.....	6	5	7
Weighing pupils.....	5	....	....
Conf. with superv.....	5	6	11
Supply list work.....	2	2	....
Committee work.....	....	16	15
Guidance.....	....	15	18
Club work.....	....	10	21
Minutes.....	458	500	522
Total time in school			
Minutes.....	422	451	451

From this table the following conclusions may be drawn:

The elementary school teacher works seven hours and thirty-eight minutes daily. Of this time she spends seven hours and two minutes within the building and the remainder at her work outside of school.

The junior high school teacher spends eight hours and twenty minutes at her work daily. Of this time she spends seven hours and thirty-one minutes within the building and the remainder outside of school.

The senior high school teacher spends eight hours and forty-two minutes at her work daily and of this time seven hours and thirty-one minutes is spent at her work within the school.

Now, to determine just how this daily time of the typical teacher is taken up, a division of the activities reported was made. Three classifications were set up, namely, teaching activities, activities directly related to teaching, and routine, clerical and administrative school duties. From an analysis of the final results of the study, as reported by the teachers, the following groupings of time may be made.

	Elem.	Jr. High	Sr. High
Total work day.....	7h. 38m.	8h. 20m.	8h. 42m.
Time in school.....	7h. 2m.	7h. 31m.	7h. 31m.
Teaching.....	4h. 27m. (58.3%)	4h. 8m. (49.6%)	3h. 48m. (43.7%)
Related to teaching.....	1h. 43m. (22.5%)	2h. 44m. (32.8%)	3h. 19m. (38.1%)
Routine, etc.....	1h. 28m. (19.2%)	1h. 28m. (17.6%)	1h. 35m. (18.2%)

From the findings of this study, the following general observations may be made: (1) the typical teacher's working day approximates 8 hours, and (2) teachers spend between 58 per cent and 43 per cent of their daily time in actual teaching, the rest being spent in such things as might be classified as nonteaching school activities.

Happy to Say

By WILLIAM McANDREW

ALL the urge to self-examination preached at me when I was young emphasized concentration on my sins. None of this seems to have given me any strength. I can't recall any case of anyone becoming more energetic or effective from centering on his faults. The teachers who helped me most found something in me worth while or pretended they did. Of the principals or superintendents who bossed me those who mixed praise with their corrections did me the most good. I have long believed this to be the schoolman's most successful course but now I have scientific, statistical proof for my belief. When I see you, if you ask me, I'll tell you about it.

CHARLIE CONE, superintendent of schools in Lake Chelan, Wash., corrects my tribute to Charlie Dienst, of Boise, who risked his job by investigating the withholding of school funds. I didn't spell his name right. "I approve your sentiment," says the good friend in Lake Chelan, "he's a credit to the profession. My brother served with him in our army in France."

DOROTHY DALTON, in her bright "Tips for Travelers," remarks that she saw a smaller proportion of well-dressed women in Paris than in Topeka. You can tell this to the back-number member of your school board who suggests dispensing with your teachers of fads and frills. You can get a committee of mothers to organize an efficient protest against dowdiness in education. You can count on all the retailers of good goods joining the ranks of school supporters. It is your teachers who build good trade.

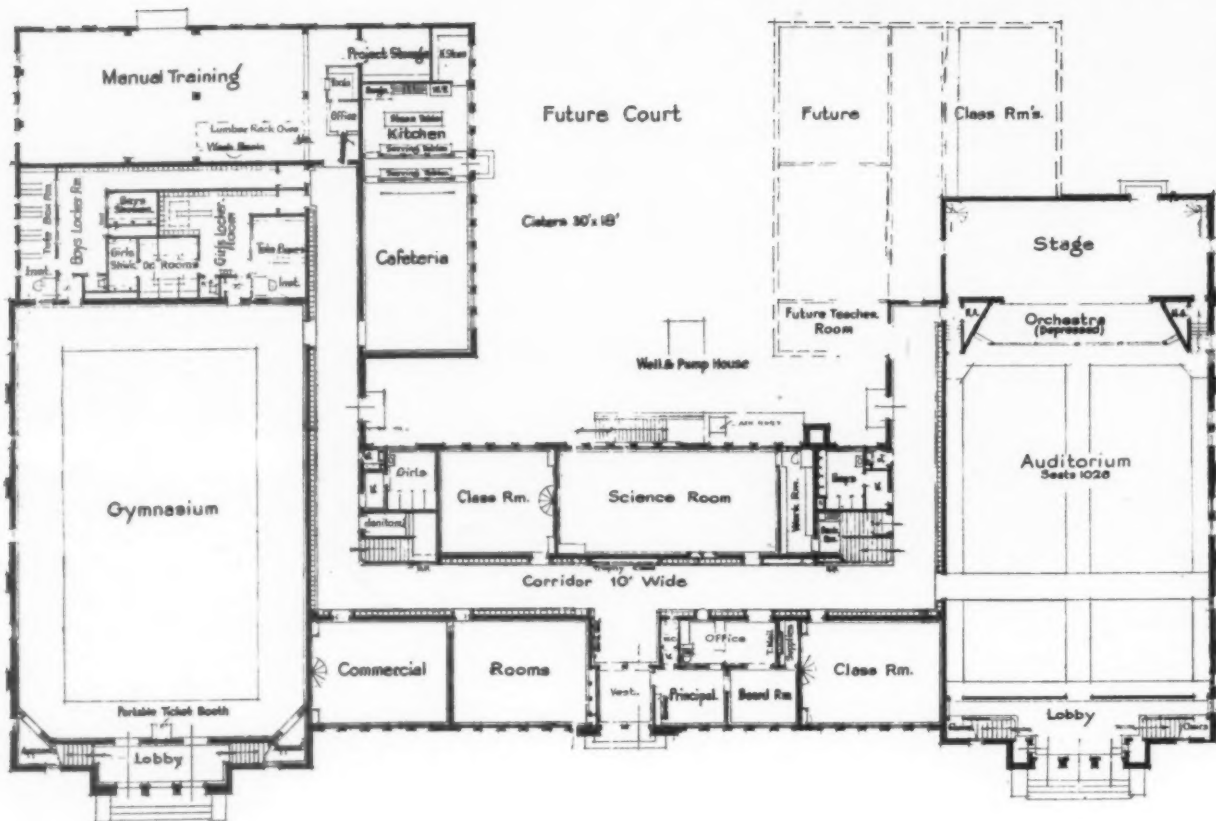
I HAVE noticed that some persons who make much money or attend prize fights or are officers in the army or navy or are high up in crooked politics quite generally assume I am inferior because I am a schoolmaster. When I compare the intrinsic value of my business with theirs I find it easy to tell them they are poor guessers. If this is done without heat it is one of the most entertaining of indoor sports.

INTO the hotel lobby in Oklahoma City came half a dozen men so sure of themselves that I asked my schoolmaster neighbor who they were. "Race track gamblers." "Why don't our men have as much assurance as they?" "They can if they try; it's all an assumption." "Is it? You go out and come in as confident as they are." He did; he was. It is a matter of saying, "I am respectable, I am of value." It gets into your blood and then into your muscles and bones and you stand and walk as you say you are. If you think Ichabod Crane style you look and act like him.

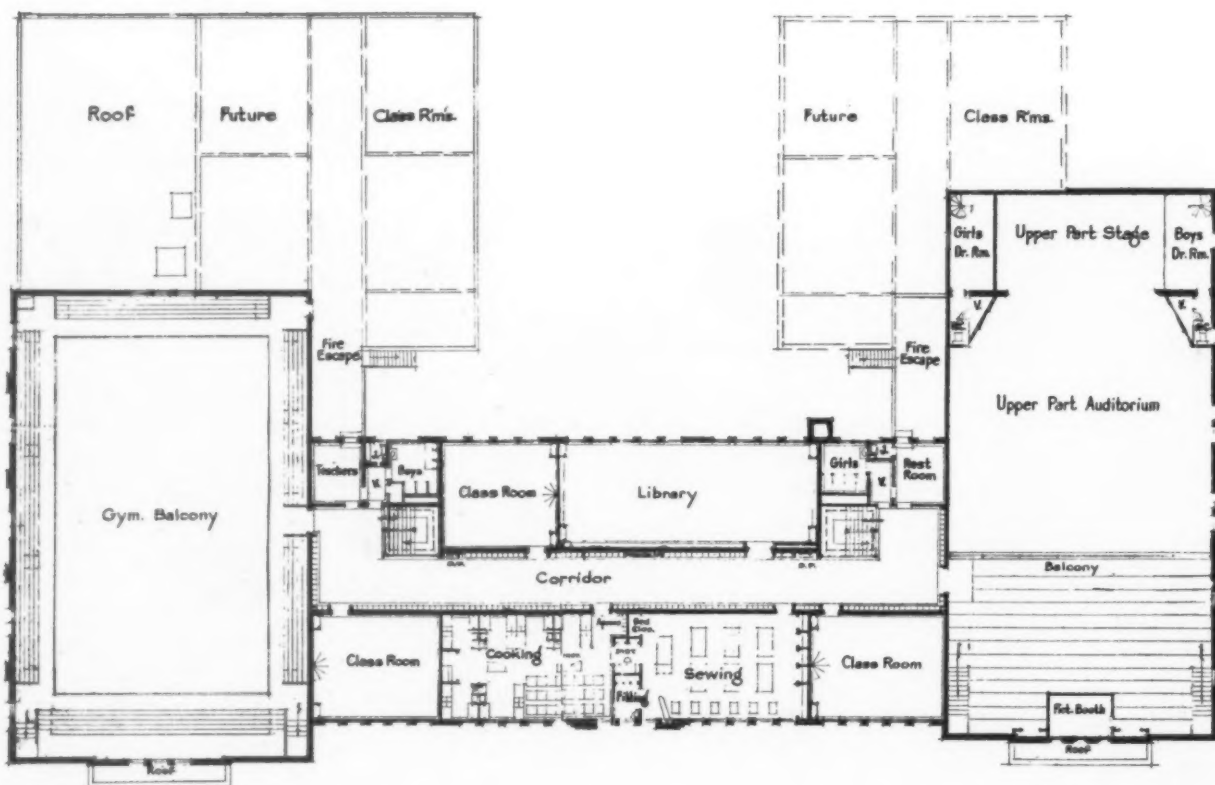
CHILDREN name themselves. The stately Celina, woman grown, is still "Licky" to her family. Maxwell got himself called "the czar," General Sherman was "Uncle Billy," General Scott, "Old Fuss and Feathers," Andrew Jackson, "Old Hickory," and Thomas J. Jackson, "Stonewall." I know schoolmen called, "Eely Ed," "Gumshoe," "Old Lock-and-Key," "Straightgoods," "Gentleman George," "Cheerup," and "Nevernag." Somebody's ready to christen you, but you are making the name you're going to get.



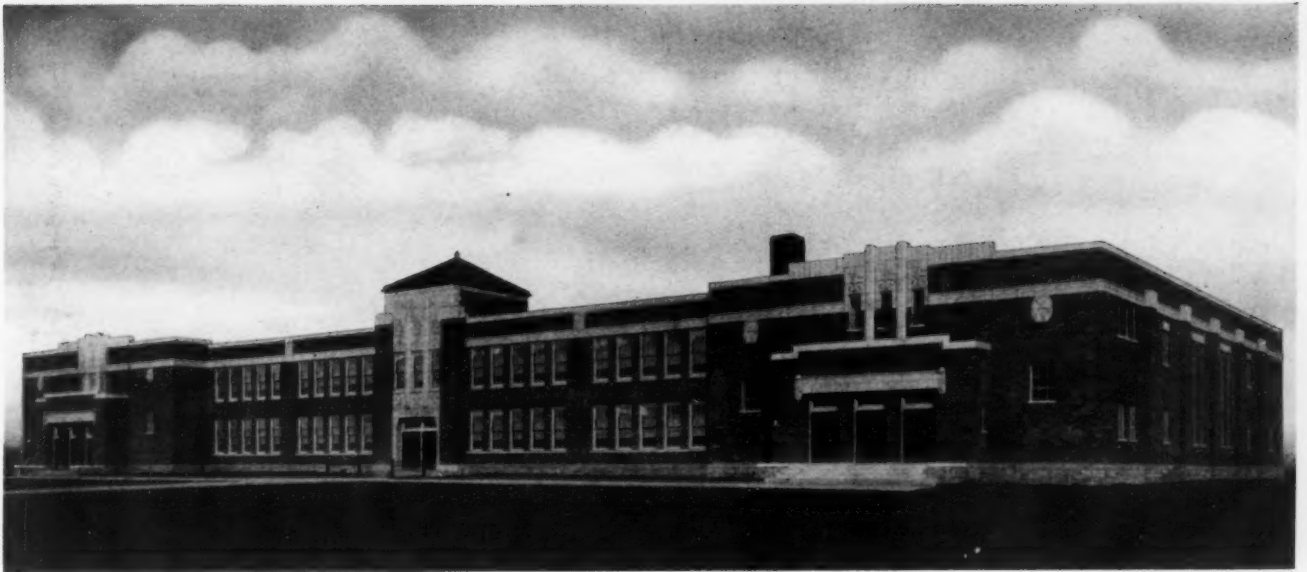
THE SCHOOL PLANT



The west wing of Washington Rural High School houses the gymnasium; the east wing, the auditorium. Peterson & Almon, Kansas City, were the architects. The plan of the first floor is shown above.



At the low cost of 20 cents a cubic foot the building was constructed. This is the second floor plan.



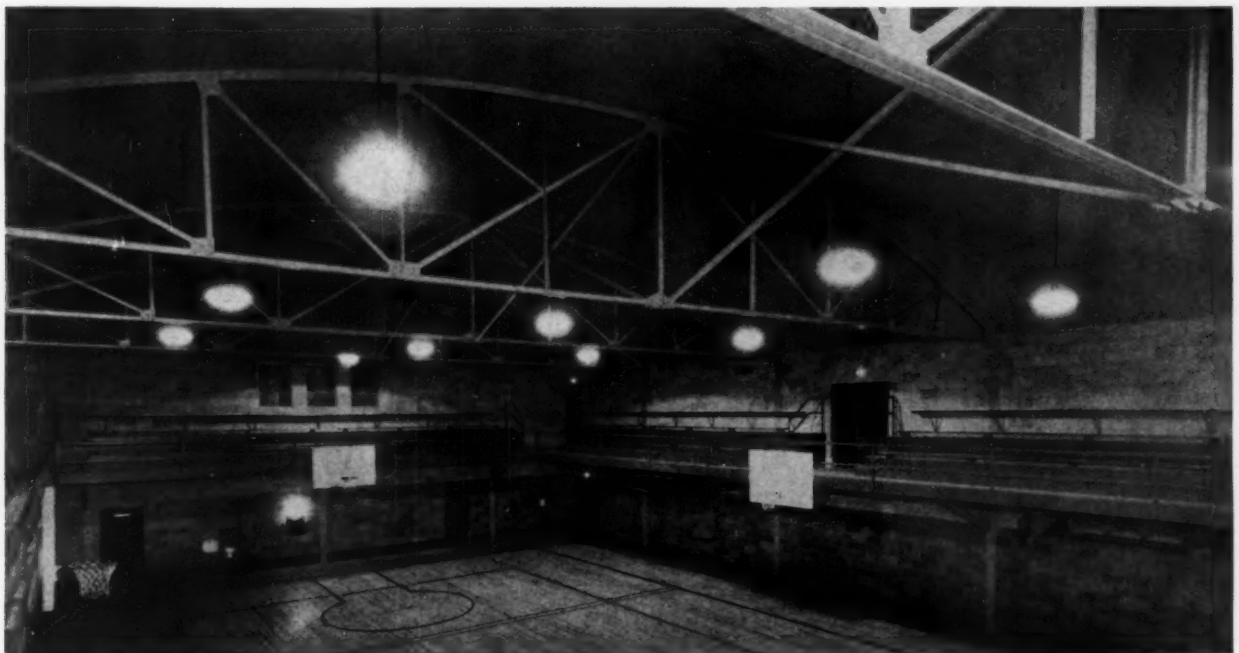
THE Washington Rural High School district is mainly a residential suburb in Wyandotte County, Kansas. The building is located on a high knoll four miles from the limits of Kansas City, Kan., and from it the sky line of Greater Kansas City can be seen. In addition to the space required by the building, the site of approximately ten acres provides ample space for a regulation football field, a practice field, and for future tennis courts.

Complete as It Stands

By OWEN H. COBERLY

The building contains 714,000 cubic feet and cost \$142,690, or 20c a cubic foot. This remarkably low cost, which includes the general contract, plumbing contract, electrical

equipment and heating equipment, is not the result of unusual circumstances. It can be largely explained by the complete specifications prepared for the building, together with



The large gymnasium has walls of glazed tile, an acoustically treated ceiling, and a white maple floor.



Here are administrative offices and science room. Each unit section of the laboratory tables contains an ink well, double electric plug, double gas cock and a sink with an asbestos-cement cover that, when put in place, makes a level top table.



an earnest desire to make the most economic use of good materials.

The building is of fireproof construction with a buff brick exterior. California plaster and buff glazed tile are used throughout the interior. Floors of colored asphalt tile carry out the color scheme. Ceiling slabs are carried on concrete beams that were cast in rough sawed lumber forms so that, after being properly stained, they would give the appearance of walnut beams. The spaces between the beams are treated to give proper acoustical qualities.

The arrangement of the building is ideal from the standpoint of securing as little disturbance as possible from gymnasium, shops, cafeteria and auditorium. The gymnasium and auditorium are at opposite ends of the building, and each can be shut off from the rest of the building when outsiders come in for various activities.

In planning the building major consideration was given also to the need for developing many-sided interests in boys and girls, and for their general cultural development as well as leisure-time activities. The west wing is almost entirely occupied by the gymnasium and the east by the auditorium.

Features of Gymnasium

The gymnasium, which is 60 by 90 feet, has a basketball court 40 by 78 feet, leaving ample space for bleachers outside the court. Three hundred persons may be seated on the first floor and 500 in the balcony. The walls are lined with light brown glazed tile. The ceiling is covered with acoustical board paneled in four-foot squares. The floor is made of white maple treated with a wood preservative. A vestibule independent of the rest of the building furnishes entrance to the gymnasium. The boys' and girls' locker and shower rooms are entered from the corridor as well as from the gymnasium through vestibules. These rooms are equipped with steel lockers, tote-box rooms and offices for the physical directors.

The auditorium, occupying the east wing, has a seating capacity of approximately 1,000 and is equipped with standard opera chairs. The walls are plastered to give a modified mottled Spanish effect; the ceiling is covered with acoustical board. The stage is 20 feet deep and 54 feet wide with a proscenium opening 30 feet wide and 16 feet high. The orchestra pit is depressed 4 feet 6 inches below the stage level. The auditorium is heated and ventilated mechanically by thermostatic control.

Administrative Suite

The central portion, first floor, contains the administrative offices and the commercial, science and recitation rooms. The administrative offices include a student lobby, a secretary's room, the board room and the principal's office. In the secretary's room are a large fireproof safe, a telephone switchboard and a program clock. The board room, entered from the lobby, contains a director's table and companion chairs. Adjoining the board room is a large supply room. In the principal's office is a specially constructed shelf which provides wiring facilities for a radio system to be connected with all classrooms.

The classrooms, which vary in size, have a capacity of thirty-five to forty-five pupils. The rooms are unilaterally lighted with a window area equal to approximately one-fifth of the floor space. The walls are cream colored plaster, and the wood trim is red oak, stained and waxed. The ceilings have exposed rough concrete beams stained walnut to make a pleasing contrast with the cream colored walls and panels. Each room is equipped with a natural slate blackboard extending the full length of one side of the room. At the front of each room are a cork bulletin board and a book blackboard of four leaves of natural slate.

The science room is equipped for twenty-four pupils at the laboratory tables, leaving space at the front of the room for twenty-four tablet-arm chairs for lecture demonstrations.



A typical classroom and the commercial rooms. Concrete ceiling beams were cast in rough sawed lumber forms. These have been stained to give the appearance of walnut beams. The spaces between these beams have been acoustically treated.



The science room is equipped with laboratory tables, each unit section of which contains an ink well, a double electric plug, a double gas cock, a sink and an asbestos-cement cover which may be placed over the sink to make a level top table. Other science room equipment includes a fume hood with blower to remove poison gases, a notebook case, a display case, a demonstration desk, a dark room and an aquarium.

The second floor of the building includes the library, the sewing room, the cooking room and recitation rooms. The library and study room is equipped with green linoleum top tables, a magazine rack, a dictionary stand and the supervisor's desk. The ceiling and floors are finished similarly to those of the classrooms, with walls of a modified Spanish effect, waxed in order to preserve the finish and facilitate cleaning. The wood trim is birch finished walnut to match the study tables. The shelves provide space for 4,000 volumes.

The home economics division on the south side consists of two large

rooms with the same interior finish as the other rooms. One room is equipped for clothing and related subjects. It has six work tables, each with drawer space for four girls, and one extra large cutting table. Both electric and pedal machines are used. One side of the room contains large drawers for pupils' supplies, other drawers for materials and a large clothes closet. Space for a roll-away bed is included. The fitting room is equipped with full length mirrors and has ample closet space.

The instructor's office separates the two rooms. This office contains a desk, a built-in cabinet for reference materials and supplies and a cloak room. The adjoining room is used for foods and related subjects. It includes lecture space, blackboards, bulletin boards and tablet-arm chairs for twenty-four pupils. This space may be converted into a dining room for serving meals. There are six complete unit kitchens equipped for four girls each. Each unit is furnished with either a gas or an electric range, a cabinet, and a sink. Lockers for

laboratory uniforms, a built-in china closet, a supply closet, a broom closet and refrigerator space are included. When fully equipped, this division will provide facilities for laboratory and lecture work dealing with all problems of the home.

Year's School Supplies for New York City System

When Patrick Jones, superintendent of supplies in the New York City schools, goes shopping, his list contains 18,512 items. More than 4,500 bidders are notified that the school system is in the market.

During the year 1934, for example, school supplies costing more than \$2,575,000 were delivered to the schools. These included 2,144,872 books; 800,000,000 sheets of paper, or about four sheets a day for each child; 2,500,000 lead pencils, an average of two pencils per child a year; 900,000 pen holders, or less than one pen holder per child, and 5,415,120 pen points, or about five per child per year.

The cost per child per day for all books and supplies is as follows:

Elementary schools	\$.0081
Junior high schools . . . . .	.0117
Senior high schools . . . . .	.0203

A total of 216,000 tons of coal were delivered costing \$6.50 a ton.

Protecting Paint

A suggestion worth trying in the schoolroom has to do with protecting freshly painted woodwork with a thin film of water wax. School interiors are much more cheerful and appealing to children if the walls, doors and window trim are painted in a pleasing color scheme. Maintenance costs usually militate against paint finishes.

Newly painted surfaces can be preserved for a longer time if they are coated with a thin film of water wax before being handled. The wax keeps finger prints and grease marks from penetrating to the new finish and keeps dirt on the surface where it may be washed off easily.



The cooking room on the second floor has six complete kitchen units, each equipped for four girls. The lecture space, equipped with movable chairs, may easily be converted into a dining room.

Less Noise Sounds Well

By IRWIN T. CATHARINE

ONE thing that has been definitely settled in the past few years is that noise is an economic waste exacting millions of dollars each year.

What is noise? There are many differing definitions. Noise can be defined as energy—a sound without a pitch—but for our purpose it is any sound that interferes with the task at hand, *i.e.* teaching of the subject and receptivity of the pupils.

Sound travels at the rate of approximately 1,100 feet a second. At this high speed the infinite number of energy sound waves striking the body have the same tiring effect a bather experiences when bathing in the ocean with high seas rolling, although, of course, to a lesser degree.

Harvard's Problem

Until 1895 no serious consideration was given to the subject of sound, but at this time Harvard University decided to build an auditorium that would embody all the latest architectural features. This meant the elimination of all the customary draperies, plush cushions and carpeted floors and the substitution of linoleum, marble tile and plain design.

The auditorium was a beautiful structure from an architectural standpoint, but the acoustics were so poor that it was impossible to understand a speaker halfway down the auditorium. On Harvard's faculty at that time was W. C. Sabine, professor of physics, who was given the task of studying the reasons for the poor acoustics and of solving the problem if possible.

He discovered many interesting things: that various building materials have different coefficients of ab-

sorption; that the time a sound lasts in a room of a given volume is definite for this particular volume and can be designated as reverberation, meaning the time the sound lasts after the source of the noise has ceased; that sound lasts a definite time for perfect audition in a room of a given volume. This period he designated as the optimum, the length of time in which sound should die out in order to give correct acoustical results.

From these he developed the formula known as the Sabine formula, $T = \frac{VK}{A}$, in which T is the time of reverberation, V is the volume of the room, K is the factor .0500, and A is the units of absorption in the room.

Acoustics was now definitely taken out of the realm of guesswork and experimentation and put on an absolute scientific basis. Now the acoustical engineer can take any given room, whether it is a classroom, auditorium, church, swimming pool, radio broadcasting studio, office or cafeteria, and figure the exact number of units of absorption necessary to eliminate annoyance resulting from noise.

How Acoustical Engineer Works

In order to figure units of absorption it was necessary to have a standard, and 1 square foot of open window space, with nothing on the other side so that all sound waves that passed through the window traveled on indefinitely, was used to designate 100 per cent absorption.

To determine the units of absorption of various materials, a sound chamber was built. This was a concrete room built inside another concrete room with an air space between the two, thus eliminating the possi-

Extensive investigation into acoustical treatment conducted by Mr. Catharine, superintendent of buildings, board of public education, Philadelphia, over a period of years, reveals the significant points about the mechanics of noise described in this, the first of two articles. Later, he will show the application of these principles to schools.

bilities of sound entering from the outside and giving erroneous results on the material tested.

A sound of definite known intensity was then generated in the room and measured. Seventy-two square feet of the material to be tested was laid on the floor and the constant sound then again generated and its intensity again measured. The difference between these two measurements gave the units of absorption. This quantity divided by 72 gave the unit of absorption per square foot of the material under consideration and was designated as the coefficient of absorption for that material.

For instance, the coefficient of absorption of hard plaster is 3 per cent; concrete, 1.5 per cent; carpets, from 10 to 40 per cent, dependent upon their thickness and texture, and the average adult, from 4.7 to 3.8 units, dependent upon the clothes worn. Coefficients for sound absorbing material range from 30 to 94 per cent, depending upon the material and the thickness.

Sound is measured for loudness by

what is known as the decibel scale. A decibel is the unit universally adapted for measuring sound loudness and corresponds to the temperature scale for measuring heat. Zero on the decibel is known as the threshold of audibility; ten decibels corresponds to the noise that a leaf makes rustling to the ground; 95 decibels is the sound made by an airplane, and 108 decibels is what is known as the threshold of feeling, that point at which sound becomes so intense that it is painful.

In decreasing the loudness level of noise in a room, it may be said that each successive decibel reduces the existing noise energy 20 per cent. A five or more decibel reduction of noise in the average classroom is satisfactory, practical and economical. A six decibel reduction of noise is equivalent to removing approximately 75 per cent of the sound energy or noise making factors.

It is not the intention or the desire of the acoustical engineer to remove all the noise in a room because the room would then become unbearably quiet. As the air conditioning engineer has found that approximately 70° F. is the ideal temperature in which to work and removes the excess heat, so the acoustical engineer removes the excess noise, making for harmonious working conditions. Experience has shown that the elimination of from five to eight decibels is usually sufficient to remove the noise annoyance factors.

Owing to the fact that the average building is constructed of good sound reflecting material, the sound generated bounces back and forth in that room several hundred times before enough energy is absorbed to make it inaudible. It can be readily seen that the sound built up by reflection, or reverberation, is much greater than the actual source of the sound and must be eliminated within the limits of the optimum.

There are various types of acoustical materials on the market, and in considering materials for schools there should be taken into account sanitation, maintenance, durability

and efficiency. Schools regularly wash and paint interior surfaces so that the material selected must be capable of being washed and painted at frequent intervals without deterioration or loss of sound absorption.

It is my opinion that the teaching effort and time necessary to subdue noise in an untreated classroom are an economic waste that can and should be eliminated. In a noisy classroom, teaching, concentration, industry and hearing are maintained with effort.

Many business organizations have learned that the use of acoustical

treatment pays for itself many times over when properly used in typing rooms, private offices, general offices and conference rooms. This has come as a result of careful investigation into the gain in efficiency both in mechanical and mental operation. Similar conditions are found to a great extent in many of the schools, and it is my belief that we may well follow the example of commercial leaders in availing ourselves to the fullest extent of the relief afforded against disturbing noises by the proper use of acoustical material.

Supplying the School With Hot Water

CONFRONTED with the problem of installing a domestic hot water system that will supply 5,000 gallons of hot water during a school day, the head of a school plant has sought the advice of *Domestic Engineering*, a plumbing and heating journal. The magazine replies:

"In the first place, we would suggest that if any of this water is to be used for showers it be heated in a separate heater set at 100° F., to avoid any danger of scalding. If any of this hot water is to be used for kitchen service, it should also be heated in a separate heater to about 180° F. All other water for lavatories and sinks is satisfactory if heated at 150° F. at the heater."

The next thing the school man needs to consider, the journal points out, is the peak load that will have to be handled. If 5,000 gallons are to be drawn off during a five-hour period, this is an average of 1,000 gallons an hour and will involve roughly a load equivalent to 3,500 square feet, equivalent direct radiation, taking 3½ square feet to a gallon.

The amount of storage provided will affect this load very considerably. If, for example, 7,500 gallons of storage were possible and practicable, this 7,500 gallons would be adequate to supply the entire 5,000 gallons to

be drawn off during the school session and could be heated during the remainder of the twenty-four hours, which is a nineteen-hour heating period. The heating rate of the water under this condition would be

7,500 gal./19 hrs., or approximately 400 g.p.h.

and the heating load would be only 400 g.p.h. x 3½ or 1,400 sq. ft., E.D.R.

If no storage were provided water would have to be heated as fast as used. Actually, however, there would be some peaks in the load and without storage the heater would have to be able to heat the water as fast as it is drawn, actually becoming an instantaneous heater.

"Without knowing much about the installation beyond the fact that it is a school," the magazine concludes, "it seems to us that the peak for any one hour would probably not exceed 2,000 gallons, of which about 75 per cent (or 1,500 gallons) would be available to carry over any peak that might occur.

"In this way the heater, in a case of peak load, would heat 1,000 gallons during the peak hour and 1,500 gallons more could be drawn from storage, making 2,500 gallons available in case of need. The heater would then have a steam rating of 3,500 square feet, E.D.R."



Ready for Play at Leyden!

By GEORGE V. DEAL

REALIZING the necessity of providing for organized play, the board of education of the Leyden Community High School, District No. 212, in Franklin Park, Ill., decided to provide the facilities to make a health and playground program possible.

Student enrollment has increased rapidly at the secondary school level. Today Leyden has an enrollment of 498 boys and girls in contrast to the 78 which composed the student population in 1924. To keep pace with this growth, land has been purchased at three different times resulting in a present campus area of twenty acres.

No material development work on the grounds had taken place up to July, 1935. Then, owing to pressing need, several plans were prepared and studied with the result that, following numerous revisions, a final decision was reached.

The program called for a quarter-mile running track, a football field, five concrete tennis courts, a baseball diamond, girls' hockey field and three soft ball diamonds. In addition, the necessary sprinkling system, drainage system and landscaping were included.

The track has spring and life. After excavating to a depth of 16 inches, a fill was made consisting of 8 inches of No. 6 crushed rock, 4 inches of coarse locomotive cinders, 2 inches of medium cinders and a finishing top layer of fine cinders with just sufficient clay to bind the surface.

Four laps are required to make a mile. The 100-yard and the 120-yard dashes are accommodated on the straightaway while the 220-yard dash must start around the north curve. For these three events, the track is 24 feet wide. The remainder of the distance around the track, however, is 16 feet wide. The curves at

the north and south ends represent a half circle each with a diameter of 236.26 feet.

A good track is well drained. A 12-inch concrete drain pipe follows the inside of the track around the entire field. Twelve lateral drain pipes paralleling each other run east and west across the field and connect with the main drain. At either end of the

Organized play for children and also adults was the aim of the board of education of the Leyden Community High School, Franklin Park, Ill., in planning its playground. Mr. Deal, principal, describes in detail how a twenty-acre tract has been developed into a modern athletic field.

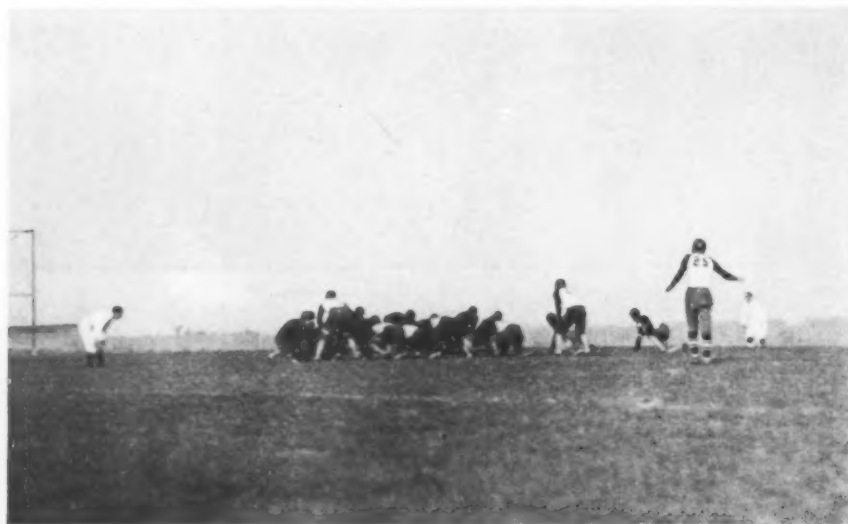
field and at each intersection of the lateral with the main drain is a catch basin. There are twenty-six of these catch basins on the inside of the track.

The base of the track has a 4-inch slope toward the inside. There is also a 2-inch slope on the surface toward the inside of the track. This slope enables the catch basins to collect and carry away the surface water.

As the area inside the track is used for a football field, a good sprinkling system is essential. Water is secured by means of a 4-inch cast iron water

joints. A sleeve is placed in one slab covering approximately one-half of the bar to allow slipping.

The courts have a slope of $2\frac{1}{2}$ inches from the east to the west side to provide proper drainage in the playing area. The drainage from the court surface is collected by the drain tile on the west side of the courts, back filled with crushed stone. The surrounding ground slopes away from the court so that the surface water will not drain upon it. After the working surface had been troweled and



An exciting moment in the last quarter! The area inside the track is used for a football field. The entire field is enclosed with an 8-foot wire fence.

pipe which connects with the existing 6-inch water main in King Street. The pipe follows the inside of the track around the entire field. By means of eight 1-inch sprinkler outlets distributed about the field, water may be secured with ease. Two 4-inch gate valves allow the water on either side of the field to be shut off while repairs in the system are made on the opposite side.

Tennis is a game that will carry over to later life. As a result, five tennis courts were constructed. Each court is 50 feet wide by 120 feet long and built according to specifications of the Portland Cement Association.

The finished slab is 5 inches thick with metal reinforcements placed 2 inches from the top surface of the court. Dowel bars $\frac{5}{8}$ -inch round, 30 inches long and spaced 3 feet on centers are placed across all expansion

before the concrete had hardened, the surface was lightly brushed in one direction with a fine hair broom to eliminate the glare.

The court lines are $1\frac{1}{2}$ inches in width and made of white concrete so that painting of lines is unnecessary. Another interesting feature is that in place of a subgrade of cinders, a 1-inch layer of sand was placed on top of the subgrade, leveled and compacted so as to form a level base for the concrete and to prevent any bond between the subgrade and the concrete. In this way the concrete slab slides on the sand when it expands or contracts.

Approximately 920 feet of fence 10 feet high and two $3\frac{1}{2}$ -foot swing gates were used as backstops for the tennis courts. The tennis posts are removable so that volley ball standards may be used if desired.

The baseball diamond is a regulation 90-foot diamond with pitcher's box 1 foot higher than the elevation of the base lines. The infield has been excavated to a depth of 6 inches below its finished grade and back filled with a mixture of sand and clay. Drainage is obtained by means of hard burned drain tile laid beneath the base lines with three laterals extending toward the outfield. The backstop is of standard design and 20 feet high.

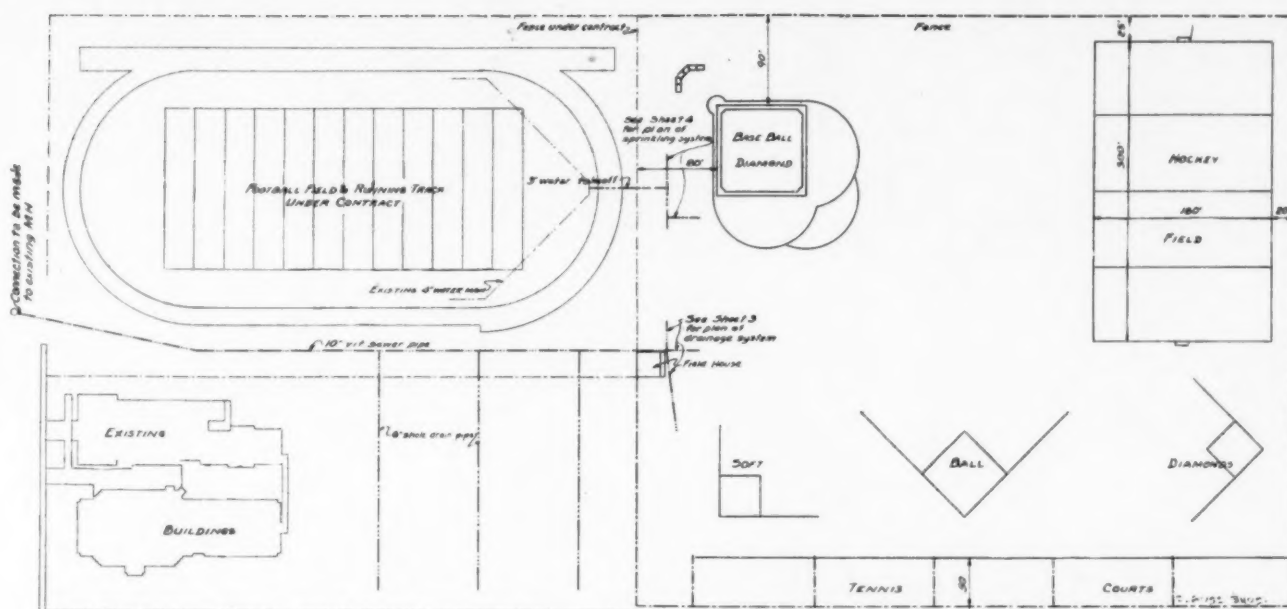
The hockey field, for girls, is of regulation size, 180 feet in width and 300 feet in length. Concrete markers are placed in the ground at the four corners of the field and at the ends of the two 25-yard lines and one 50-yard line to make marking easy.

Three soft ball diamonds—two 45-foot diamonds and one 60-foot diamond—have been provided. The bases are indicated with concrete markers inserted into the ground.

The entire area is seeded with a mixture of 50 per cent blue grass, 30 per cent red top, 10 per cent Canadian blue and 10 per cent rye. Shrubs and trees help to make an attractive athletic field. Much of the pleasure derived from playing games depends upon the surrounding landscape. The field will have a hedge of shrubs and trees and will be landscaped.

A committee composed of the contractor and two members of the science department selected trees and shrubs that grow well in this area and also have value as specimens. The selection follows:

<i>Trees</i>	<i>Shrubs</i>
Silver maple	Pussy willow
Birch	Red bud
Tree of heaven	Persian lilac
Horse chestnut	Russian olive
Hackberry	Flota privet
Hawthorn	American plum
Maidenhair	Japanese barberry
Locust	Glossy buckthorn
Flowering crab	Common buckthorn
Chinese elm	Sumac
American elm	Honeysuckle
Weeping willow	High-bush cranberry
Sycamore	Golden bell
Mountain ash	Bridal wreath
Linden	Ninebark
Pin oak	Dogwood
Burr oak	Mock orange
Lombardy poplar	Rose



Plan of the twenty-acre campus of the Leyden Community High School, Franklin Park, Ill., around which has been built an extensive health and playground program.

The athletic field is enclosed with an 8-foot wire fence. This fence, with top rail and extension arms, carries three strands of barbed wire on the extension arms. Persons are prevented from getting on the track and football field by means of a 5-foot fence with top rail, which follows the outside curb of the running track. A fence of this type aids materially in handling large crowds.

A large amount of material and labor goes into a construction job of this kind. The five tennis courts took four carloads of cement, thirteen carloads of sand and ten carloads of crushed stone. Some 6,600 feet of drain tile were used. This tile consists of 4-inch, 6-inch, 8-inch and 10-inch sizes used in the north ten acres. The sprinkling system in the same area required 3,500 feet of pipe, ranging in size from 1½ inches to 4 inches. Snap valves were used throughout the sprinkling system. This was considered a distinct improvement over the ordinary type.

Some 1,583 yards, or 2,057,000 pounds, of screened locomotive cinders were required for the track, and 800 yards, or 1,000,000 pounds, of No. 6 crushed stone. Approximately 5,600 lineal feet of fencing, varying in size from 5 to 10 feet, were used. Between 1,500 and 1,600 shrubs and

75 trees of different varieties were used in landscaping the field.

To prevent the entrance of dirt, all drain tiling was covered with 2 inches of crushed stone before backfilling. The drain tile next to the tennis courts was covered with 3 feet of crushed stone to ensure proper seepage.

The field was named after a pioneer resident, Dr. Harold E. Dodge. Doctor Dodge came to Franklin Park in July, 1893. Since that time, he has been deeply interested in the develop-

ment of Leyden Township and its institutions of learning. As school health officer and medical adviser to the department of physical education, it was inevitable that he should be accorded this honor.

An athletic field of this type is a distinct improvement for any community. It is hoped that the grounds will inspire pupils to greater love for outdoor activities. It is also desired that adults will renew their interests in organized play under the supervision of a playground director.

Football Toll Laid to Board Economy

The causes of serious injury and death in the annual toll of football injuries have been laid directly to the economies practiced by school boards in a survey conducted by the American Football Institute.

The report found evidences in the high schools studied of a haphazard selection of coaches and improper coaching facilities, of improper technique in the execution of the fundamentals of the game and of insufficient medical supervision of players.

Five suggested reforms are (1) the selection of coaches and assistants with the same care exercised in the

employment of classroom teachers; (2) insistence upon the use of protective playing gear and equipment scientifically designed and tested; (3) impressing upon young coaches the necessity of teaching sound fundamental principles, for players well grounded in fundamentals are rarely injured; (4) establishment of properly supervised safety clinics, and (5) representation of high schools on the rules committees of all sports.

Serious injuries resulting from football are comparatively rare in universities and the larger colleges where these principles are carried out.

Safety Rules for School Bus Riders and Drivers

By ROBEN J. MAASKE

THE number of school pupils being transported each year is increasing because of the demand of rural families for transportation of their children to central high schools and because of consolidations. With this increase in pupil transportation, there naturally has been a larger number of accidents. While this number is not particularly alarming, it behooves school authorities to exercise every precaution to eliminate factors that result in accidents.

Causes for school bus accidents can be traced in many cases directly to the driver. Occasionally, however, the fault lies with the school children or with the poor bus equipment furnished by the district, driver or contractor. Granted that the district either owns, or has contracted for, good school bus equipment, and granted that reasonable care has been exercised in the selection of a driver, there are certain additional safety aids that should be observed.

Principal Calls Conference

Pupils riding on the bus should scrupulously observe certain fundamental rules of safety and courtesy. It is not enough merely to post a set of regulations on the school bus door or in the coach body, although that should be done and will prove helpful. Before doing this, however, it is essential that the principal, through conference with the drivers and pupils riding the busses, discuss with them the need for the observance of certain rules of safety and common courtesy. Such a conference can do much to promote a spirit of understanding and cooperation.

As a basis for such a conference discussion, I offer a set of ten rules each for school bus riders and for school bus drivers. It will prove helpful to have a typed or printed copy of each set posted in the school bus coach for convenient reference.

Rules for Bus Riders

1. In approaching the stopping place for the bus, always walk toward the traffic. Do not play on the road while waiting for the bus.
 2. Be on time; the bus has a definite schedule and cannot wait.
 3. In entering the bus, avoid crowding and disturbing others. If you live at the end of the bus route take one of the back seats.
 4. When the bus is in motion, do not stand, extend your arms out of windows, move about, or leave or enter the bus.
 5. While on the bus, you are in the driver's charge and must obey him.
 6. Damage done to seats or other bus equipment must be paid for by the pupil.
 7. Help keep the bus clean, sanitary and orderly.
 8. See that your conversation is clean, and never loud or boisterous.
 9. Always treat your fellow pupils with courtesy.
 10. In leaving the bus, remain seated until it stops. If you cross the road do so in front of the bus after making sure the highway is clear.
- In connection with the following set of safety rules, the bus driver should have a clear understanding of his authority and responsibility. The importance of keeping the bus in ex-

cellent operating condition, of observing carefully the time schedule for different parts of his route, and observing all rules of the road, should be stressed particularly.

Rules for Drivers

1. Check periodically on the condition of the bus, particularly the brakes, tires, lights and cleanliness.
2. Observe carefully the time schedules for different points on your route, and be on time.
3. Be sure the door is closed before starting the bus; avoid jerky starts and sudden stops; go slowly over bumps and rough places; do not turn or swerve suddenly.
4. Do not (a) leave the bus with motor running, (b) drive backward on the school grounds, (c) fill the gasoline tank while children are in the bus, (d) allow anyone except teachers and pupils to ride.
5. Observe carefully all signs, signals, rules of the road and courtesies to other drivers.
6. Take the proper precautions in signaling before stopping or turning, and keep well to your side of the road. See that the road is clear before allowing the children to cross.
7. Keep your person neat and clean, and your conduct above criticism.
8. In case of an accident or breakdown, remain with the bus and send two responsible children to the nearest place for help.
9. Bring the bus to a full stop before taking on, or letting off, children; pull as far off the hard surface as road conditions will permit.
10. Report to the principal any unmanageable pupils only when you feel unable to handle the situation.



A Small School Serves Lunch

By J. M. BENNETT

WHEN the Delaware state board of education included in the recently constructed addition to the Millsboro Public School an equipped lunchroom and kitchen, with the understanding that the school would run a self-supporting cafeteria, it was not without some apprehension that those who were made responsible took over this task. A school cafeteria was something entirely new in this community, and consequently had to overcome many prejudices.

Naturally the hot dog stands, as well as some of the restaurants of the town, were loath to lose their school trade, while many of the rural people were fully convinced that the whole

affair was a well plotted scheme for someone to profit at their expense. In addition, some of the local merchants contended that the school had no right to buy wholesale from firms outside the community.

Many of the rural pupils who had been going "up town" for lunch had the spark of mistrust of a school cafeteria fanned to such an extent, by some of the unscrupulous lunch counter proprietors, that they had a tendency to misinform their well-meaning but uninformed parents regarding this "new frill." These and many other handicaps confronted the Millsboro school cafeteria at the time of its opening.

Since it is not the purpose of a

Given a completely equipped lunchroom and kitchen, the Millsboro Public School, Millsboro, Del., faced the problem of conducting a self-supporting cafeteria. Mr. Bennett, the principal, explains how this was accomplished despite numerous handicaps.

Delaware school cafeteria to make profit greater than that necessary to take care of breakage and other emergencies, the functions of such a cafeteria must be considered first. The Millsboro school board, concurring with the state director of home economics, believes that these functions are as follows:

1. To provide properly prepared and served food for school boys and girls at a minimum cost.

2. To provide a satisfactory, comfortable and pleasant place for pupils and teachers to eat lunch, whether they buy it in school or bring it with them or both.

3. To provide a proper social situation for pupils to learn good habits of eating.

4. To provide a practical application of the teachings of health by guiding pupils in their choice of food.

5. To provide training and experience in spending money to the best advantage.

The policy of the Millsboro School has been to buy at the greatest advantage possible and to curtail expenses whenever and wherever expedient; therefore, it has been possible to prepare and serve wholesome food at reasonable prices.

What the Pupils Pay

A balanced platter special costs 10 cents; an eight-ounce bowl of soup and three crackers, 4 cents; five ounces of meat, 5 cents; seven ounces of meat combination, 5 cents; seven ounces of meat substitute, 5 cents; a No. 10 dipper of potatoes with gravy, 3 cents; five ounces of vegetables, 5 cents; two slices of bread with butter, 2 cents; any one of a variety of sandwiches, 4 cents; any one of a number of salads, 5 cents; ice cream (8 servings to a quart) 4 cents; five ounces of dessert, 5 cents; a cookie, 1 cent; four ounces of tomato juice, 2 cents; a half pint of milk, 2 cents; an apple, 1 cent; an orange, 2 cents; a tangerine, 1 cent, and a banana, 2 cents.

Although efforts have been made to keep the cash balance below \$100 by reducing prices, increasing servings, giving an occasional bonus to

the efficient and hard-working manager, giving food gratis to needy children and adding new equipment, there is on hand at present a cash balance of several hundred dollars. This has been accomplished, despite ample portions of wholesome food served at low prices, and at a time when many school cafeterias are being forced to increase their prices in order to break even.

Dining Room Is Cheerful

The dining room at Millsboro, which is equipped with tables sufficient to seat 100 pupils at a time, is a light, cheerful, well ventilated room with walls decorated by pictures created in the school art department. Tables are furnished from time to time with appropriate decorations by the home economics department. The tables are of various heights so that all the children regardless of size may be seated comfortably. Here all who eat at the school are furnished an opportunity to sit at a table and eat in a pleasant atmosphere regardless of whether they have bought their lunch in the school cafeteria or brought it with them.

What a splendid life situation the school cafeteria provides for teaching the pupils proper table manners and correct habits of eating! Here the elementary teachers, who sit where they can observe their children, note whether their teaching of social conduct and proper table manners is carrying over to the dining room. Since the child learns to do by doing, even the most awkward soon behave in a way more graceful than one could ever hope for through abstract teaching alone.

The lunchroom likewise furnishes the high school boys and girls an excellent opportunity to rid themselves of self-consciousness while they endeavor to put into practice the table etiquette they have acquired in the classroom and elsewhere.

Some time is given in both the elementary and the high school to emphasize the importance of a balanced ration. Examples of well bal-

anced noonday lunches are prepared by the home economics department and displayed from time to time, and buying at the greatest advantage is encouraged both by example and precept on the part of the teachers.

In the elementary school, in addition, the teachers are on hand to train the pupils to select dishes quickly and ask for them courteously, to guide them in making wise choices, to encourage them to bring part of their lunch from home when this is thought necessary, and to advise them concerning the handling of any surplus money they may have left. The teachers are thus furnished a splendid educational opportunity to teach children to buy carefully and spend wisely. As the children learn to choose advantageously, the teachers drop into the background, playing the rôle of alert supervisors.

How the Cafeteria Is Organized

In the beginning, the local board of school trustees delegated to the supervising principal the responsibility of organizing the school cafeteria. He, therefore, with the assistance of the home economics instructor, worked out the following plan for preparing and serving the food:

1. The home economics instructor prepares the menus and has general supervision over the kitchen during the time she is free from teaching, but is not expected to help with the manual labor. She also assists the principal in his buying, and offers suggestions whenever possible.

2. A manager, employed by the principal and paid a salary from the cafeteria funds, is responsible for preparing and serving the food as directed by the instructor of home economics.

3. The principal, with the assistance of the manager and home economics teacher, employs student help sufficient to enable the manager to take care of the work satisfactorily. Each student helper serves an hour each day, and receives a 15-cent lunch as compensation.

Since there is seating space for only 100 children, and nearly 300 eat

in the lunchroom each day, it is necessary to run three shifts. By permitting the primary grades to go through at 11:30 a.m., the intermediate grades at 11:45 a.m., and the upper grades including the secondary school at noon, there is almost a continuous line passing through and always ample table space.

The office secretary receives, counts and banks in a special account all the money received by the cafeteria. She also pays by check all approved bills, and keeps all books under the supervision of the principal.

The janitor helps to keep the rooms clean, and the teachers fit into the organization by dismissing their pupils promptly, bringing them into the lunchroom on time and supervising them while there.

The supervising principal of the Millsboro Public School is not only responsible for supervising the lunchroom but also for employing all help for the cafeteria. His responsibility to the community is the same here as with any other phase of the school activities. He must directly or indirectly through the school publication, the local press, the parent-teacher association, letters and personal contact inform the parents of the advantages of a school cafeteria, and must keep them in touch with the menus being served and the prices charged. He must not only sell the cafeteria to the people of the community, but must see that it is worthy of their support and patronage, ever promulgating those policies that will best benefit the ones for whom the cafeteria and the entire school exist — the children.

It is also the supervising principal's duty to furnish permission forms. These must be signed and returned to the school by all parents who desire their children excused from the school ground at noon. He is responsible for the organization and must ever be on the alert to discover defects and to make improvements. He must not only see that good quality food is prepared properly and served correctly in a tidy and sanitary manner, but he must also supervise the



In this cheerfully decorated room, the Millsboro high school pupils eat. Below, in the same room but at an earlier hour, the teachers help the lower grade children select suitable lunches.



teachers in their technique of handling the lunchroom situation. It is his duty to approve all bills paid, approve all checks written, audit the

cafeteria books, make out reports and see that the office secretary is given time to count and bank the money.

The Millsboro school cafeteria man-

ager is responsible for preparing the food, according to the menus worked out in cooperation with the home economics teacher, having it ready on time, and serving it properly. She also checks all bills, places orders with the principal for needed supplies, helps take the monthly inventories, sees that economy is practiced at all times, and (assisted by the janitor as well as her pupil helpers who are entirely responsible to her) keeps the kitchen and lunchroom in an attractive and sanitary condition.

As has already been explained, the office secretary handles the funds, writes checks and keeps the books. In addition to this she keeps on file all bills and receipts, as well as the addresses of commercial firms selling cafeteria supplies. She takes care of all correspondence.

The cooperation of the teachers in carrying out their responsibilities is indispensable. In addition to going to the lunchroom with their pupils and supervising the choice they make in dishes, the type of lunch they bring from home and their eating habits, the Millsboro teachers are truly interested in the cafeteria and are helping in the following additional ways: (a) by striving to develop an appreciation for the cafeteria; (b) by encouraging the use of the school lunchroom in preference to less desirable eating places in the vicinity of the school; (c) by patronizing the lunchroom when convenient, demonstrating correct table manners, and otherwise setting a good example for the pupils; (d) by giving the supervising principal and manager suggestions for improvement; (e) by correlating the lunchroom activity with English, health and other subjects; (f) by training the pupils to help keep the room clean; (g) by encouraging the children to be courteous to visitors, and helpful to younger children, and (h) by dismissing early enough before lunchtime in the lower grades to give the pupils time to wash their hands.

The janitor sweeps and dusts in the lunchroom as soon as all the pupils are out and the food is re-

moved from the counter. He also removes refuse from the kitchen and lunchroom, scalds the garbage pail, keeps all refuse cans clean, scrubs the kitchen floor once a week, assists in bringing heavy supplies into the kitchen and opens boxes.

The parents of the Millsboro consolidated school district have come to realize that the school cafeteria is beneficial both to them and their children and are shouldering more and more of the responsibility. The majority of them now feel it their duty to find out what is being served, what it costs, what their children are buying, how much money they should furnish the child, and what dish should be bought to supplement the lunch sent from home.

With the splendid cooperation of all concerned, the Millsboro school

cafeteria has been able to overcome or reduce to a minimum the many obstacles that confronted it in the beginning, and to become an integral part not only of the school but of the whole community.

From the beginning the children have been free to buy their lunch in the school cafeteria or at one of the eating places in the near vicinity, as they and their parents think best. For a while it appeared that the school cafeteria would not be able to survive, but the artistic lunchroom provided and maintained, the wholesome food prepared and served, and the attractive prices made possible through careful buying have caused practically all the rural children who buy their lunch, and many town children, who once went home at noon, to patronize the school cafeteria.

Nutrition Work With Children*

Reviewed by MARY S. ROSE

Since the first edition of this interesting book appeared in 1926, it has served as a comprehensive source of information regarding the problems of malnutrition in childhood, and an inspiring guide to practical means of dealing with them.

The first half of the book is devoted (1) to the evidences of nutritional need, as shown by the prevalence of general malnutrition, by dental defects and by studies of children's food intake; and (2) to discussion of the true meaning of nutrition and the aim of modern nutrition work—"an all-round normal development and rational program of living for every child." Advances in methods of assessing nutrition have been noted, and the numerous recent studies of growth and development have been summarized, often by means of illuminating tables or graphs. The chapter on the causes of malnutrition has been ex-

tended to include discussion of the influence of the economic depression and a summary of recent studies showing the difference between adequate and optimum nutrition.

The second half of the book is devoted to the prevention and treatment of malnutrition and educational work in the school. Here the chief additions are a section on high school health and a finely critical one full of suggestions evaluating the results of a nutrition-health program.

The book is concrete, practical and stimulating. Ample bibliographies at the end of each chapter furnish material for further study. Parents, teachers, nutritionists, social workers, nurses or any others who are interested in the physical betterment of children will find in this book in simple, nontechnical language a wealth of information constantly enlivened by experiences from daily life, a thoughtful analysis of underlying causes and many suggestions for developing a nutrition-health program.

*Roberts, Lydia J., *Nutrition Work With Children*, Second Edition, University of Chicago Press, 1935. \$4.

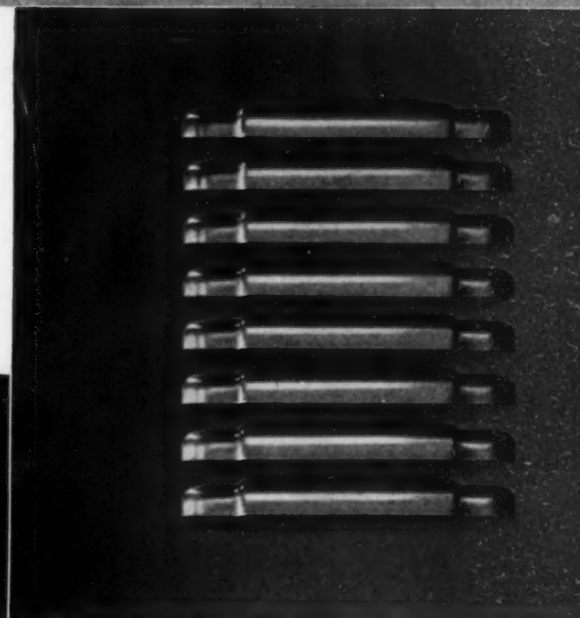
THE NEW LOUVERS are only one of the Many NEW Features in the NEW STEEL LOCKERS

You want three things in lockers: 1—Good Looks. 2—Efficiency. 3—Value for your investment. You get them all in the new A-S-E Lockers.

Important new features not only provide modern beauty, but they increase the efficiency over any others ever offered.

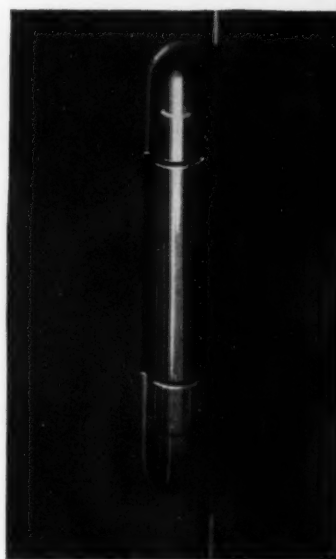
Check the new features described here. There are others, such as the precision latching with rubber cushioning, the extra-strength door, the dustproof construction, etc.

New features, plus the time-proved excellence of A-S-E materials and workmanship, make A-S-E Lockers the soundest investment on the market. Send for the catalog C-30—detailing important locker facts.



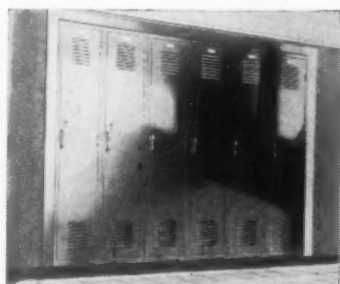
NO BARKED KNUCKLES WITH THIS HINGE

Its torpedo—streamlined shape conforms to the rest of the features in modern appearance. Prove its smoothness—rub your knuckles over it! No catching of cloths or clothing. Hinge pins covered by embosses in the door. Hinge is actually part of the door. No notches cut in the frame of the locker. Those things mean safety from tampering, a sagproof door—lifetime service.



BETTER LOOKS—BETTER VENTILATION

Completely modern, these new A-S-E Louvers give both better looks and better ventilation. On every style of locker, singly or in rows, the louvers add decoration that conforms to the clean lines of the locker itself. Of 16-gauge steel, these louvers keep their good appearance.



A FINGER TOUCH WORKS THIS HANDLE

A locker handle designed for the job. Lifts with thumb and forefinger—naturally. Even a finger touch operates it. Nothing can hang or catch on it. Padlock is held away from the door by special strike. The sweeping lines harmonize with the modern design of the entire locker. The chromium-finish keeps its beauty. Die cast from white brass for proof against breakage.



RECESSED—SLOPING TOP—ANY STYLE

Any type of installation can be efficiently met with these new lockers, available in every standard size and style. Recessed, cement base—closed base—sloping top for every requirement.

It takes 16 pages to detail the important facts about these most modern of lockers. Send for a copy of the new catalog C-30—showing you why A-S-E Lockers are the soundest investment.

At right, the A-S-E Single Tier Locker—preferable for school corridors, team rooms, etc., permitting clothing to hang full length.



ALL-STEEL-EQUIP COMPANY

INCORPORATED

605 JOHN STREET

AURORA, ILLINOIS

Pied Piper Plays a Modern Tune

By JOSEPH N. LAFERRIERE

INSPECTION, in rat control, is just as important as in the control of roaches. The rat is the most elusive of household pests; therefore, baits or traps cannot be set at random with any hope of success. A precise knowledge of the rat's habits and activities is essential.

Let us follow a ratologist in his inspection of an infested building. Where a novice would notice almost nothing, the rat man will find clues everywhere! According to Doctor C. L. Williams, quarantine officers are so skillful in their inspection of a huge vessel that they can foretell, in their reports, the exact number of rats that will be recovered after fumigation, whether two or ten or thirty! A similar skill is useful in the inspection of buildings. Doctor Williams was the first to describe this part of ratology. The evidence of rat infestation, he says, "is in their droppings, runways, harborage, nests, gnawing, odor, live and dead bodies." A detective seldom has such a wealth of clues!

Norway Rat Is Chief Pest

At the outset, the identification of species will offer no difficulty, because in nearly every case we meet only the Norway rat. The black rat has practically disappeared, save in a few colonies in seaports and in the South. In ships, on the contrary, about 99 per cent of the rat population belongs to the black type. The black rat has about the same habits as the house mouse and prefers the upper stories of the building, while the brown or the Norway rat will nest only in the basement or outside.

The most consistent and certain means of tracing rats is through their droppings. The droppings are easily recognized by their straight or curved spindle shape and by their rounded ends. Those of the mouse are of the same shape and color but smaller. The size also varies with the age of the rodent. A few large droppings, with a few small ones, will indicate the presence of a parent and its family, or from three to ten rats. When there are many large and small ones, there is of course a little colony.

Clues in the Droppings

The freshness of the droppings is another precious clue. When the dung is fresh, it is soft enough to be squeezed out of shape, and has a wet, glistening appearance. It dries up in two or three days and becomes harder. Then its surface turns dull, and later still becomes discolored, or covered with dirt or dust. A great quantity of old dung that gradually passes into new shows that a large colony is still flourishing, while a few new droppings with the old prove that most of the rats have departed.

It is remarkable how many droppings a rat will leave in one day; from 30 to 180, when it is in captivity. The alvine discharge of the rat, like that of all rodents, is passed singly and at irregular intervals; it is scattered in a haphazard way, more numerous near the nest, on the runways, and where the rat has stopped for concealment, in secluded corners, under and over furniture, under drawers, under staircases, or in cupboards, and of course between walls and floors. A few small collections

in widely separated places would indicate two or three rats. Widely scattered over a large area, they would suggest eight or ten or more, according to their freshness and other clues. The droppings are so important that the size, age and location of every one must be carefully noted.

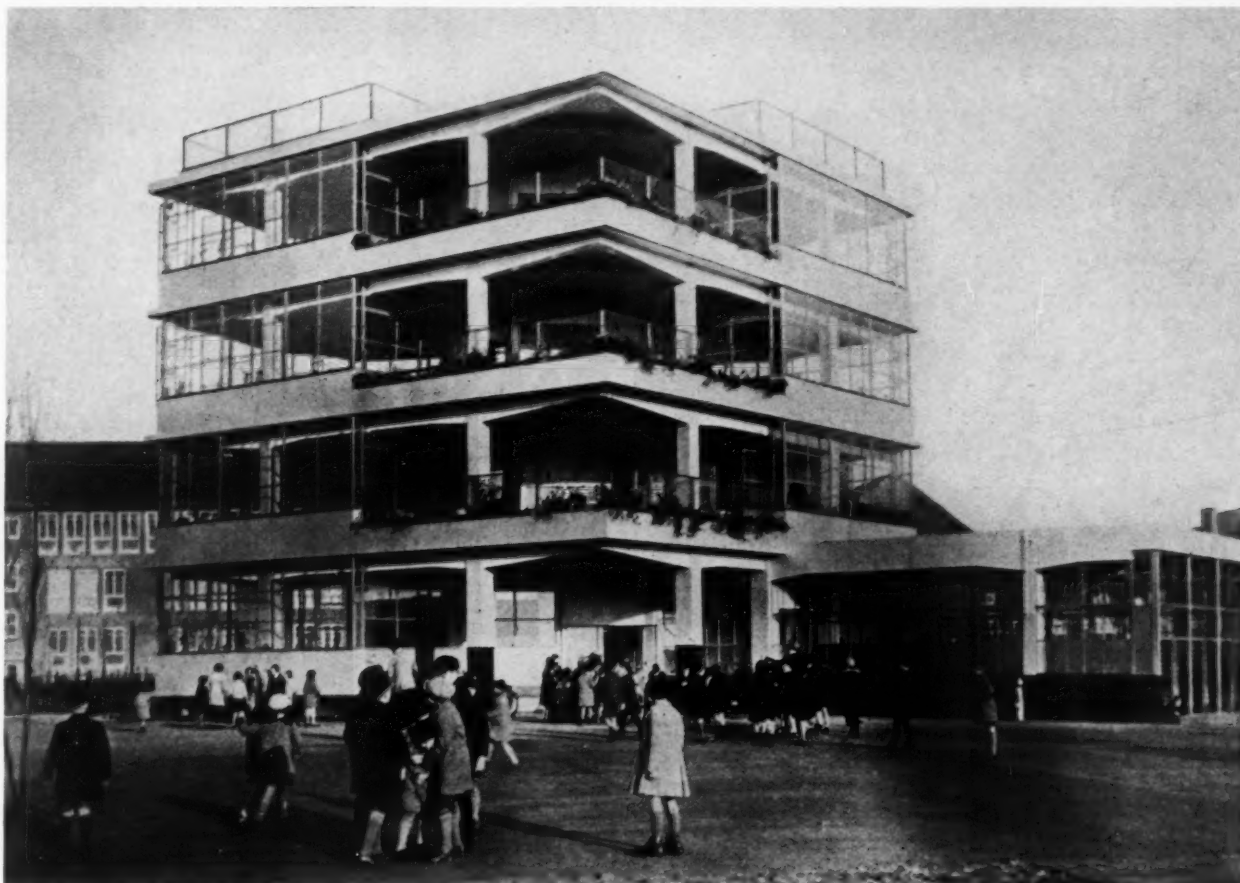
The second clue is the runway. The spoor of the rat is distinctive, with the marks of the four toes of the forefeet. There is usually enough dust for the tracks to be visible, especially if it is illuminated from the side. The black rat often drags its tail, but the brown rat carries his an inch or more above the ground. A few tracks going straight here and there would belong to two or three rats; eight or ten would soon make a maze of them. But even one rat in time can make quite a number.

Like all colonizing animals, the rat always follows the same trail, soon establishing a runway. The constant passage of many individuals, each leaving a mark and many droppings forms a well worn track. As the body of the rat is a trifle oily, and usually dusty, it leaves a mark on the wall or pipe. One or two rats will soon make a clear trail; eight or ten, a big runway.

At first, in our inspection, we shall miss most of the runs, because we are looking down on the floor for them, while the rat travels overhead,

Even in rat extermination the old gives way to the new. In a series of two articles on this subject, Mr. Laferriere, consulting entomologist, who has already been introduced as author of "Modern Warfare on Roaches," describes rat infestation and rat traps and raticides.

In Australia



SCHOOL CHILDREN OF AUSTRALIA, AS IN AMERICA, ARE OF PARENTS FROM ALL PARTS OF THE WORLD.

Learning is not limited to children
whose forebears were scholars.

Royal

"THE FINEST SINCE '97"

Write for catalog of

MODERN SCHOOL SEATING
for
MODERN AMERICAN SCHOOLS

ROYAL METAL MFG. CO., 1133 S. Michigan Ave., CHICAGO — Also New York and Los Angeles

whenever it can. It ascends a pipe or even a vertical wall, "to follow the beams, leaving a dirty semicircular mark where it swings over the cross timbers," according to Williams. The run is the usually traveled road between frequently visited places, from harborage to feeding or drinking stations, and, less often, a general route connecting all harborages. It comes out in the open only when necessary, and then it will hug the shelter or shadow of the walls, or pass behind boxes or barrels. Whenever possible, the rat goes between walls and floors, or even inside through the casings for wires and pipes. It even ascends a pipe on its hidden or interior side. The rat always takes the safest route.

The age of the gnawings is shown by the freshness of the bites and chewed-up particles. The musty odor of the rat is distinctive enough to be detected in a basement or a room or in the inside of a casing. Three or four dead bodies would indicate quite a colony. A few live rats, if seen, would have the same significance, because rats are so wary that only a few will show themselves.

Life of the Rat Colony

At this point, the converging significance of these clues gives quite a picture of the rat population in the building. The line of demarcation between one and five rats is quite clear, but not so sharp between five and ten, or between fifty and one hundred.

If we now turn to the nests and harborages, we shall get a closer view of the life of the colony. The brown rat nests only in the basement or outside, because it is essentially a burrowing animal. It may enter a dwelling house in search of food, but it will dig its hole in the ground whenever it can. It will nest inside only in case of extreme necessity. It is a sewer rat, a water rat or a field rat, and becomes a house rat only to a certain extent.

In warm countries, the brown rat's burrows are nearly always outside — under the barn or outhouse or build-

ings where the floor is only a few inches above the ground. Wooden sidewalks become veritable catacombs for rats. Rats also frequent basements and back areas that are covered with boards and live under piles of lumber and rubbish.

In cold countries, most of the rats take to the fields in the summer. The outdoor trails are much clearer, especially in the fields and river banks, and are well worn by constant passing and covered with droppings.

One of the principal tasks in rat control is the destruction of these harborages and the ratproofing of the building. All information relating to ratproof construction and repair is furnished on request by the Biological Survey, U. S. Department of Agriculture, Washington, D. C.

Outside Trails

The runways of the rat will also lead to its drinking place. In the cities, the sewer usually becomes the main highway for the rat population. The brown rat is a real water rat, or at least semi-aquatic in its habits, and needs much water to drink and to bathe in. In cities, it is from these infested sewers that rats are likely to invade schools and institutions. That is why outside trails are important in the inspection of a building.

Before any attempt is made at baiting or trapping, the rat man must observe certain precautions. The most important secret in rat control is to avoid handling the bait or the trap. The rat avoids the trap, simply because it usually reeks with human odor. The vaunted intelligence of the rat is nothing more than his sense of smell. If the bait or trap has the faintest taint of human odor, the rat will be frightened away. Through the centuries rat men have learned never to touch the instruments of their trade.

Some wear gloves. I know of one man who passes his gloves over the first horse he can find, until they are thoroughly impregnated with a good "horsy" smell. Other exterminators put a few drops of aniseed oil on their

gloves, or mix a few drops of this oil with the hands in a pound of oatmeal. This will remove all traces of perspiration and leave a delicate scent that is agreeable to the delicate olfactory nerves of the rat. Packages of bait should be handled with scented gloves as well as the traps.

Luring Once Was Main Weapon

Luring is another old secret that has been handed down from rat men to rat men. In some way or other it was discovered that the oil of rhodium had a peculiar attraction to the rat. It was used so extensively that it received the name of "oil of duty." It was distilled from certain rosewoods of the Canary Islands. Its odor resembles that of the damask rose. The supply ran out years ago, and now only the artificial rhodium is available. The commercial article is a mixture of cedarwood, sandalwood, palmarosa and geranium oils, the sandalwood producing the viscosity characteristic of the true oil. Here is a formula for artificial rhodium: rose otto, 3 parts; Spanish geranium oil, 3 parts; and sandalwood oil, 6 parts.

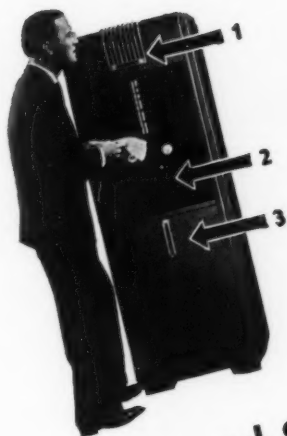
Modern chemists have discovered that the essential oils that have as main constituents the alcohol geraniol will attract rats and mice, while those that contain laniol do not. Geraniol is one of the principal constituents of palmarosa (Indian geranium) oil, citronella, ordinary geranium oil and oil of sassafras. All these oils are good attractants. Geraniol can be bought in pure form, but it should be mixed with one of these oils as a fixer. Geraniol is easily soluble in alcohol, from 12 to 15 parts to 50 parts of alcohol. It is the most powerful attractant ever discovered for insects. Among the essential oils, that of peppermint repels both rats and mice.

Rat hunters have used three other oils as much as rhodium, namely, the oils of aniseed, valerian and caraway.

Modern ratologists do not insist much on luring, but former rat men considered it one of the fine points of their art.

3

big services . . . now combined in 1 cabinet



**Ideal Program Sound System
for schools . . . gives you new
convenience at new low cost**

Western Electric's newest sound distributing equipment is high in quality, low in cost. In one compact unit it gives you three program sources: Voice or music pick-up; Radio; Records. And keys controlling loud speakers in as many as 60 rooms.

So that you may reproduce two programs at once in different rooms, two amplifiers are provided. If you never need to reproduce more than one program at a time, the second amplifier may be omitted.

A valuable feature is the new "talk-back" circuit, which enables the principal to listen-in on work in any classroom.

This new Western Electric system can improve teaching and administration in your school. Full details from Graybar Electric, Graybar Building, New York.



Western Electric

Distributed by GRAYBAR Electric Co. In Canada: Northern Electric Co., Ltd.

PROGRAM DISTRIBUTION AND PUBLIC ADDRESS SYSTEMS

Is High School Planning in Its Infancy?

By HOMER W. ANDERSON

AN INSPECTION of floor plans of high school buildings reveals scant evidence that they are put together according to fundamental basic principles. In fact, it would appear that no basic principles are followed in assembling the component units of the building. This is true despite the similarities of functional organization of the school and of the uses for which the component units are planned. It is not necessary to point out these basic similarities except to mention the class period organization, the academic, the commercial, the science, the shop, the study, the physical education units, the auditorium and the many accessory units that are common to all modern, comprehensive high schools.

Provisions for every one of these units make a high school building in Boston or San Francisco, in New Orleans or Des Moines or St. Paul. All high school buildings are singularly alike in their component parts, but radically different in the manner of assembling these parts. They all function as high school buildings, but there has been no research on how well they function, or on the question of whether there are any basic principles on which high school buildings may be assembled to function more perfectly.

Research Is Needed

High school planning is in its infancy insofar as this phase of the problem is concerned. A tremendous amount of research is needed, (1) to discover basic principles for assembling the high school building, and (2) to determine the best methods of applying them to the planning of the

building. If there are no principles that have universal application, research would reveal this fact, and we could go on with greater assurance that any way in which the different parts of the building are assembled is good enough. If there are basic principles, let us discover them and apply them scientifically to the end that school programs may function more economically and effectively in the building.

I doubt the absence of these fundamental principles. Below are listed a few suggestions and questions for the purpose of stimulating investigation in this phase of building planning.

Seven Suggestions Are Listed

1. Plumbing shall be stacked. This has a purely economical basis and is fairly well recognized in high school planning. It certainly bears on the problem of assembling the high school building.

2. Stairways and exits shall be well distributed throughout the building for the sake of safety.

3. Some parts of the building shall be more accessible to the pupils because they are used most frequently. Would this justify making classrooms and study units the central core of the building? Would it justify placing those parts used by fewer pupils in the periphery of the building?

4. Some parts of the building shall be accessible both to the student body within the building and to the public outside of the building. Would this justify placing the auditorium where it can be easily and quickly reached by pupils coming from all parts of the building and also from the outside? Does it justify this application to the gymnasium? Are there other

parts of the building where this would be a basic consideration?

5. Some parts of the building shall be placed together because the activities are in the same or similar fields. Should all commercial rooms be together? Should all science rooms be in the same part of the building? Wouldn't the same hold for shops, home economics, music and the like?

6. Certain parts of the building shall receive certain environmental considerations in their location. Are certain school activities better served by sunlight or by absence of the direct rays of the sun? Are certain science activities desirable in sunlight? Is north light desirable for art? Should the physical education units adjoin play fields?

7. Certain parts of the building shall be located so that the activities conducted therein interfere as little as possible with other activities in the school. Should noisy activities receive consideration here? Should odors from cafeterias or laboratories be guarded against or are they unimportant?

Must Learn What Is Significant

These points are presented for careful consideration. In some floor plans observed, the suggestions seem to have been applied rather accidentally. If they are worth while, they should be applied universally and scientifically. This would appear a fertile field for research in building planning. The statements made, and probably many others, need evaluation. If found significant they should be formulated into principles that should receive proper scientific application in the planning of every high school building in the future.

HEALTH TEACHING

that gets into the

EYES and SPINE



...is there to stay!

The success of your health program depends in large measure on pupils habitually doing what their lessons teach them is best for their health.

When you seat them in the American Universal Better-Sight Desk, you make it possible for them to sit *naturally* and *continually* as they *should* to protect their eyes and health. This is health teaching that is not left to chance... health teaching that is there to stay.

Classroom posture posters and interesting pamphlets relating to healthful posture and eye - protection are available for teachers' use. Address Dept. N.S.4.



The American Universal Better-Sight Desk

ACCEPTED BY THE COUNCIL ON PHYSICAL THERAPY
OF THE AMERICAN MEDICAL ASSOCIATION



AMERICAN SEATING COMPANY

*Makers of Dependable Seating for Schools,
Churches and Public Auditoriums*



General Offices: GRAND RAPIDS, MICHIGAN

DISTRIBUTING BRANCHES IN ALL TRADE AREAS

BETTER PLANT PRACTICES • • •

Avoid Use of Water on Varnished Floors

Experiences with varnished floors and sealed floors have proved, according to J. Flikeid, supervisor of housekeeping, Board of Education, Minneapolis, writing on that subject in the *Model Custodian*, that they should not be cleaned with water and scrubbing mixtures because it is harmful to the wood.

"Although the varnished wood floors are better protected against the damage caused by water than were oiled and preserved floors, especially during the time that the surface seal is unbroken, the wood is exposed as soon as the varnish is scratched or worn and it then has a surface that is just as vulnerable to water as any other untreated wood. If scrubbing mixture or similar liquid is used to remove surface seals, they cause a dissolution of the surface seal or varnish, and later penetrate into the wood, leaving an unsatisfactory surface for future treatments. The water and scrubbing mixture will also tend to penetrate between the cracks of this type of floor, which may cause the 'schoolhouse odor.'

"Wood floors that have been treated with a penetrating floor seal are better protected against water than those treated with any other known material because it is applied generously enough to fill the cracks and often seals the under part of the wood. It has also presumably filled the upper surface to a depth of about 1/32 of an inch. In spite of this fact, we advise against using water or scrubbing mixtures in cleaning these floors because its frequent use will eventually soften the penetrating seal causing its early removal by wear, after which the floor will deteriorate by leaps and bounds."

Short Cuts to Greater Efficiency

To assure longer life, try soaking new cotton mops in hot water for thirty minutes before using, suggests H. H. Linn, assistant superintendent in charge of business, Public Schools of the City of Muskegon, Mich.

Another discovery is that carbon tetrachloride, a chemical used for filling certain types of fire extinguishers, is excellent for cleaning type on typewriters. "Our print shops," says Mr.

Linn, "are also using this carbon tetrachloride for cleaning their type and find it superior to alcohol and similar types of products."

A third suggestion Mr. Linn makes is that at the close of the school year all toilet bowls, urinals and wash bowls that are not to be used during the summer months be given a thin coat of Bon Ami. "One has only to wash this off before the beginning of school in the fall to remove fly specks and other soil that have accumulated during that time."

New Walls for Old in the Schoolhouse

New developments in the treatment of walls will lend added importance to certain rooms in the school building scheduled for modernization.

Meeting with considerable favor is a process for applying wood to wall surfaces; it involves cutting and channeling short lengths which dovetail together. These produce large units of considerable length, possessing all manner of decorative possibilities.

Wood veneers have been considerably improved and can be used to surface almost any material. These may be finished like any other wood with varnish, lacquer or wax.

Waterproof wall papers have undergone changes for the better in both quality and design.

Linoleum, too, will provide a pleasing effect when it is applied to a smooth plaster or wall boards.

Decorators can enumerate several advantages that may be checked to the credit of wall canvas. This is hung like wall paper and in addition to making the walls waterproof, prevents hairline plaster cracks. It may be surface treated with oils and pigments.

A composition material, fiber tile, is made of wood fiber mixed with magnesite binder and color pigments. It is handled like wood and is fire and water resistant, resilient and possesses insulating qualities.

Many types of wall board are suitable as a finish and, of course, tiles, both vitreous and semivitreous, are always in demand.

Glass blocks or bricks are rapidly assuming new importance. Used as wall or windows, they provide ample diffused light, complete privacy, keep out much sound and reduce heat losses.

Spray Floor First to Eliminate Dust

There are only two sanitary ways to sweep floors, it is claimed on good authority—with a vacuum cleaner and with a dust mop.

"To sweep schoolhouse floors with a vacuum cleaner is a simple matter," explains W. F. Currington, custodian, City Public Schools, Jackson, Ohio. "If every inch of the floor is covered with the sweeping tool, all the dirt will be removed, and no dust will escape into the atmosphere."

"But to sweep with a dust mop is not so simple. The general practice is to put the treatment on the mop itself. This is wrong. With the dust mop treatment in a hand sprayer, start at one side or one end of the floor, travel back and forth at a moderate speed across the floor, working toward the opposite side or end and spraying as you go. Make sure that the sprayer adjustment is set so that only a vapor will be discharged. This vapor settles on the floor in the form of dew or light mist. By the time that the entire floor has been sprayed, the vapor has settled sufficiently at the starting point so that sweeping can be begun."

"In this manner the medium for controlling the dust is spread uniformly over the entire floor, and the mop does not become clogged and matted with an 'oily mud,' as is true when the treatment is put directly on it."

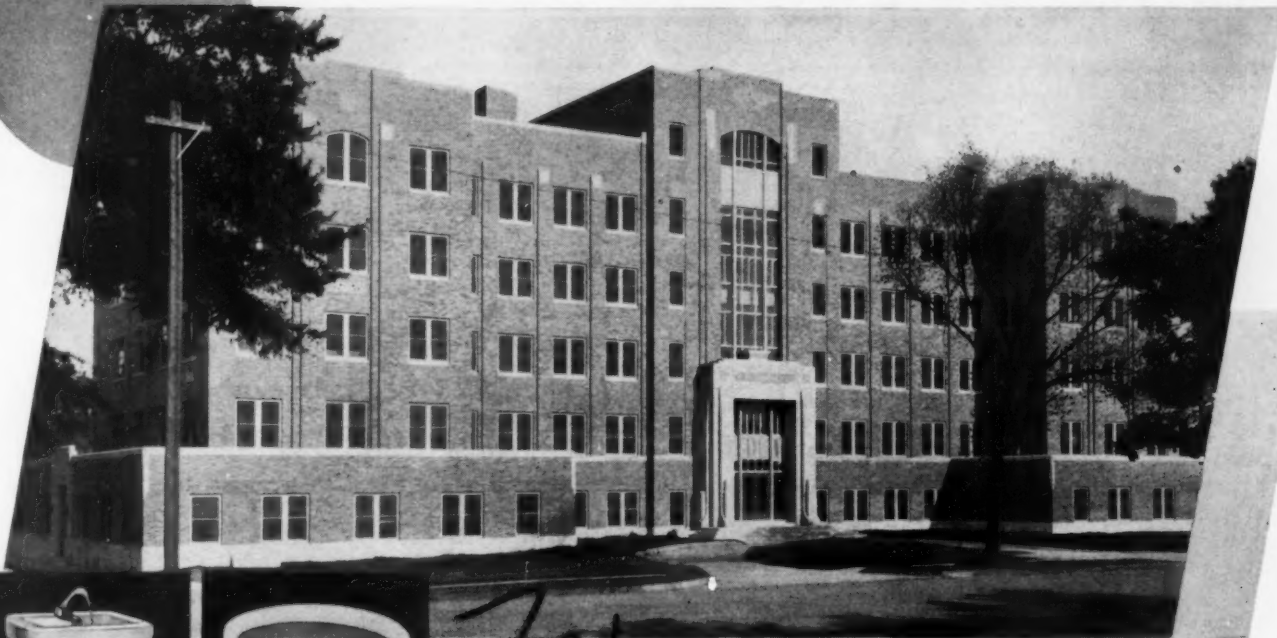
"Care must be taken by the custodian that none of the dust mop treatment escapes from the sprayer in the form of liquid, which would make the floor slippery."

"Pupils can play basket ball with perfect safety on a floor with a high gloss finish immediately after it has been swept in this manner."

AN INVITATION

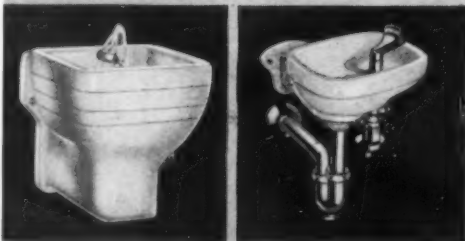
Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

PUT YOUR SCHOOL A STEP AHEAD



Crane C-9042 CORWITH
Pedestal Fountain

Crane C-9268 CORRIDOR
Recess Fountain



Crane C-9060 CORWITH
Wall Fountain

Crane C-9158 THURSTEND
Wall Fountain

CRANE SANITARY EQUIPMENT FOR SCHOOLS

Lavatories	Domestic Science Sinks
Closets	Service Sinks
Urinals	Flush Valves
Showers	Vacuum Breakers
Faucets	Valves and Fittings

With **CRANE** **DRINKING FOUNTAINS**

● Crane Drinking Fountains have safeguards which are much more advanced in sanitary principle than the early fountains which replaced the tin cups. Much forethought has gone into Crane drinking fountain design. Sanitation, of course, has been the guiding principle. Bubblers that prevent contamination of the water port and avoid back-siphonage are a prime feature. Other advantages are receptor and pedestal materials, including fine vitreous china, impervious to stains. There is great sculptural beauty in many models. Valves and fittings are of efficient, fool-

proof design, sturdy construction. The line is complete, including wall and pedestal types for corridors, fountains for ornamental use, and non-freezing types for year-round outdoor installations.

All Crane plumbing fixtures and materials for schools are designed and manufactured under the guidance of the same far-seeing principles which perfected Crane Drinking Fountains. The degree to which a school is Crane-equipped—in all departments—is a sound indication of the economy and effectiveness with which that school is able to handle the problem of sanitation.

CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVENUE, CHICAGO, ILL., NEW YORK: 23 W. 44TH STREET

Branches and Sales Offices in One Hundred and Sixty Cities

VALVES, FITTINGS, FABRICATED PIPE, PUMPS, HEATING AND PLUMBING MATERIAL

NEWS IN REVIEW

Comparative School Costs in the Southern States

Less than one-half the average amount of money spent per pupil in the United States as a whole in 1933-1934 was spent by North Carolina, according to figures issued by Clyde A. Erwin, superintendent of public instruction. Where \$67 was spent as an average by the entire country, only \$24.18 was spent in North Carolina.

Mississippi and Arkansas were the only states spending less per pupil than North Carolina, while Maryland ranked highest among the sixteen Southern states with \$68.64, followed by Missouri, West Virginia and Texas. The average salary of teachers in the country was \$1,217, and the average in the Southern states, \$714.29. On the other hand, a larger percentage of funds for school operation is provided in North Carolina than in any other state except Delaware.

New Officers of Advisory Council

At the seventh annual conference of the National Advisory Council on School Building Problems at its recent St. Louis meeting the following officers were elected for 1936-1937: president, Prof. Arthur B. Moehlman, University of Michigan; first vice president, Dr. Charles L. Spain, executive vice president, Wayne University; second vice president, Dr. Frank P. Graves, chancellor of the University of the State of New York; third vice president, W. G. Credle, state director of school plant, North Carolina, and secretary, Alice Barrows, Office of Education. The council voted unanimously to start holding its regional meetings again during the ensuing year and approved a program of cooperative planning in conjunction with the National Resources Committee.

Observes 108th Anniversary

The American Institute, a classless university which brings directly to the public knowledge of the progress made by science, recently celebrated its 108th anniversary. At a dinner held in commemoration of the event, particular stress was laid upon the activities of the institute during the past twelve years, when, under the direction of L. W.

Hutchins, director and secretary, its program has been expanded until now more than 125 meetings are held each year for the public. Other activities include the annual Children's Science Fair, the Student Science Congress, the Christmas Lectures, and the organization of some 200 science clubs in the high schools.

Bennington Enjoys Field Period

Bennington College's faculty members spent their two months' winter field and reading period in varied fashions. Five went to Mexico, where they did work in languages, painting and in connection with the National Theater of Mexico. Members of the music department gave recitals on the concert stage and at radio studios, made records and arranged for the presentation of their compositions. Others spent the time preparing books, completing experiments in the college laboratories, and one did resident work in a New York hospital. The school, which reopened this week to continue in session until June, will graduate its first class at that time.

P. E. A. Holds Regional Conference

The New York State branch of the Progressive Education Association expects 2,000 persons to attend the regional conference at Buffalo on May 8 and 9. As a result of the success of the conference at Buffalo last year, the scope of the conference and the geographical area served are both being enlarged. More than 200 Canadian members of the association are planning to attend the meeting.

Barnard College Buys Property

Additional property has been purchased by Barnard College, New York City, at a cost of \$500,000 as the first step in a long-term plan for expansion. On the newly acquired block, it is proposed to erect an academic building to contain rooms for language departments and psychology laboratories, space for a reference library, studies and seminar rooms and a music library of phonograph records. A program presented by Dean Virginia C. Gildersleeve to raise \$4,250,000 for the needs of the college was accepted by the board of trustees at a meeting in December.

Consolidation of Schools in the State of Virginia

Elementary schools in Virginia have been consolidated to too great a degree while high schools have not been consolidated enough to offer complete programs to the pupils enrolled, according to Raymond V. Long, director of the division of school buildings, in the annual report of the superintendent of public instruction from that state.

Children are being hauled long distances, sometimes as far as fifteen miles, to attend grammar schools, while high schools are located as close as five or ten miles apart. There are at present approximately 460 accredited high schools in the state, which, he maintains, should, through an organized system of transportation, be reduced to not more than 250 well organized and well conducted schools.

He suggests also that an extensive study should be made of the transportation system employed in the state, so that in the future a stagger system to permit busses and drivers to be used for longer periods each day may be developed by the schools.

To Celebrate 75th Anniversary

The seventy-fifth anniversary of its founding will be celebrated by the State Teachers College, Edinboro, Pa., on April 23 with a program dedicated to the importance of a well balanced program for the preparation of teachers in Pennsylvania. At the commencement on May 26 a bronze bas-relief to the memory of J. A. Cooper, the first principal of the institution, who served in that office from 1861 to 1893, will be dedicated.

Oklahoma Lowers Insurance Rates

Reductions in fire insurance rates on all school buildings in Oklahoma have been announced by the Oklahoma Insurance Board. The new rates, which are in effect now, are approximately 25 per cent lower than the old and are mandatory on the part of agents and companies.

Nonfiction Writing Contest

In order to encourage the writing of nonfiction articles by persons who have never contributed to a national magazine of the "general interest" class, the *Reader's Digest* has announced five prizes of \$1,000 each for unpublished articles deemed of lasting interest. Conditions of the contest are contained in the March issue.

AUSTRAL SCHOOL EQUIPMENT

WINDOW • WARDROBE • BLACKBOARD FIXTURE

Architects who use
AUSTRAL in
representative prominent
Schools . . .



High School Valley Stream, L. I.
Frederic P. Wiedersum—Archt.



Port Chester High School, Port Chester, N. Y.
Tooker & Marsh—Archts.



Prospect Ave. School, Westfield, N. J.
Coffin & Coffin—Archts.

The judgment of School Specialists favors AUSTRAL Products, evidenced by their long use in America's finest schools . . . Simplified . . . Economical . . . Efficient . . . Modern . . . By true excellence of workmanship they stand the test of experience . . . Specify AUSTRAL.

AUSTRAL SALES CORP.

101 PARK AVENUE, NEW YORK CITY

Vol. 17, No. 4, April, 1936



AUSTRAL Windows afford perfect ventilation without draft.



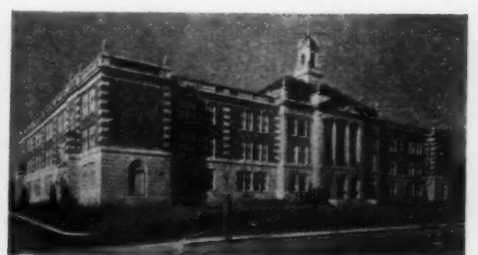
The AUSTRAL Multi-Use Wardrobe results in increased economy and more room.



The AUSTRAL Multi-Use Blackboard Fixture renders blackboard space more flexible.



Tarrytown High School, Tarrytown, N. Y.
Guilbert & Betelle—Archts.



Junior High School, Mamaroneck, N. Y.
Knappe & Morris—Archts.



Theodore Roosevelt High School,
Washington, D. C.
A. L. Harris—Archt.

PRIVATE SCHOOLS

Plan Three-Unit Building

Program at Radford School

A three-unit expansion program is being considered by the Radford School for Girls, El Paso, Tex. The first unit, a \$50,000 educational building, is being designed by Percy McGhee and Guy L. Frazier, architects.

The other two units, a swimming pool and an auditorium, will depend to a certain extent upon the growth of the school, according to Dr. Lucinda deL. Templin, principal. The educational building, which will correspond architecturally to the present buildings, will house all the classrooms, laboratories, studios and offices.

Dr. Howard Bement Dies

Dr. Howard Bement, head master of the Asheville School, Asheville, N. C., since 1927, died at Palm Beach, Fla., following a stroke. His death was a shock to the school, for though Doctor Bement had been ill for some time, recent reports had indicated that his health was definitely improving. A Lansing, Mich., boy, Doctor Bement went to the Hill School, Pottstown, Pa., in 1904 as master of English, and in 1912 became head of the department, remaining in this position until he went to Asheville.

Haerter Made Burroughs' Director

Leonard D. Haerter, acting director of the John Burroughs School, St. Louis, for the past year, has been appointed director of the school. He succeeds Wilford M. Aikin, who resigned to become head of the general education board of the Progressive Education Association.

King-Coit Presents Hindu Legend

Sometimes classed as a professional school, the King-Coit School, New York City, an institution specializing in the teaching of acting, dancing, drawing, painting and modeling to its four to twelve-year-old pupils, drew attention to itself during the past year by a performance of "Nala and Damayanti," a Hindu legend. The drama had to be repeated five times. Says *Vogue*: "Although their action is stylized you never feel that it has been imposed upon them; they know its meaning from the inside out."

Memorial to Elliott Speer

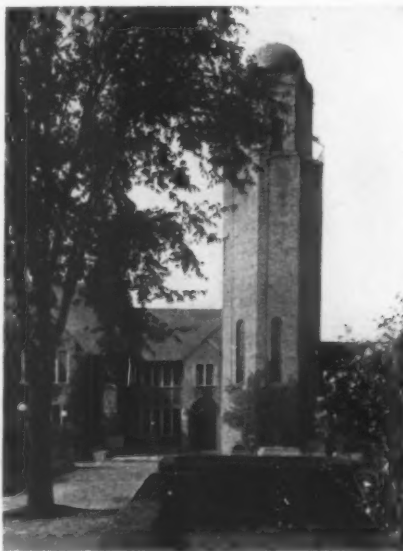
A gift of \$50,000 was received by Mount Hermon School, Northfield, Mass., from an anonymous donor, to be used by itself or as a basis for a larger fund for a memorial to Elliott Speer, former head master who was murdered in 1934. The memorial will probably take the form of a recitation hall to replace the historic but inadequate building now in use.

Wyoming Seminary Head Dies

Dr. Levi L. Sprague, who joined the teaching staff of Wyoming Seminary, Wilkes-Barre, Pa., in 1866 and became president of the school in 1892, was still the active head of the institution when he died at his home at Kingston, Pa., on March 6. Doctor Sprague, who had recently celebrated his ninety-second birthday, was the author of two books and a trustee of Syracuse University.

Cranbrook Offers Scholarships

Cranbrook School, Bloomfield Hills, Mich., has announced a competition for honor scholarships open to boys from



Tower of the main building, Cranbrook School for Boys, Bloomfield Hills, Mich.

the sixth to the tenth grade. The amount granted to any winner will vary according to his need, no grant being less than \$250 or more than \$1,200 a year, to be renewed annually until he graduates if he proves through his work and his citizenship that he is worthy of the honor.

Central North Carolina

Plans Boys' Prep School

A charter has been drawn up for the proposed boys' preparatory school in central North Carolina by a committee composed of O. A. Kirkman, High Point; Julius C. Smith, Greensboro, and Dr. Clarence Poe, Raleigh, to be filed with the secretary of state for incorporation.

Plans for the school were begun more than a year ago to meet the needs of some hundreds of young men who are going to schools in other states. A board of trustees, elected several months ago at a statewide meeting of interested persons, has for members James S. Flicker, Greenville; Leslie Weil, Goldsboro; J. E. L. Wade, Wilmington; Dr. W. D. James, Hamlet; Dr. Oren Moore, Charlotte; George Watts Hill, Durham, and the members of the committee on incorporation.

Gift of \$61,500 to Riverdale

An anonymous gift of \$61,500 in first mortgage real estate bonds to the Riverdale Country School, Riverdale, N. Y., has been announced by George McAneny, chairman of the board of trustees. The interest on the bonds, according to the specifications of the donors, is to be used to foster scholarship. Riverdale, of which Frank S. Hackett is head master and founder, consists of a group of four schools, Riverdale Country School, a preparatory school for boys with emphasis on music and art; the Country Day School for Girls, which offers similar courses; the Neighborhood School, which enrolls children from four to nine years of age, and the Riverdale School of Music, an affiliated school not limiting its enrollment to the pupils in the other three schools.

Henson Appointed to State Board

Clarence C. Henson, director of the Isidore Newman School, New Orleans, has been appointed a member of the Louisiana State Board of Education to succeed the late Dr. A. B. Dinwiddie, president of Tulane University.

New Head at Chestnut Hill

Frederic Evans Camp, head master of the Evans School, Tucson, Ariz., and at one time assistant to the dean at Princeton University, has been elected head master of the Chestnut Hill Academy, Philadelphia, to succeed Gilbert H. Fall, who resigned last October. Mr. Fall is continuing with the school as a member of the faculty.

It's time to SIZE UP Old Dishwashers



■ **NEW STANDARDS OF PERFORMANCE** in today's Hobart-Crescent Dishwashers **EMPHASIZE** the importance of a *careful check of your dishwashing pantry now!* Has your business **OUTGROWN** your dishwashing facilities? New Hobart-Crescent Models will handle 25% to 50% more tableware with no increase in the amount of floor space required for dishwashing operations!

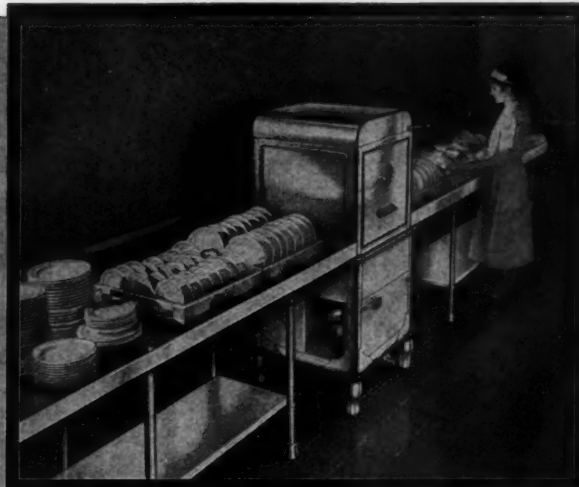
Models for Every Size of Kitchen

(Upper right) DeLuxe "AM-5" provides high capacity in minimum space, with the famous Revolving Wash and New Revolving Rinse.

(Above) Model XM, compact Automatic, ideal where thousands of dishes must be washed in a short period of time. Dual Drive Conveyor.

Let us recommend the Model that gives you the capacity you need. Simply check Dishwashers—and send coupon for valuable book that includes detailed descriptions of new models.

**SOLD BY LEADING
KITCHEN OUTFITTERS**



Savings Pay for New **HOBART- CRESCENT** DISHWASHING EQUIPMENT

Are you "getting along" with worn, out-of-date dishwashing machines that have "seen their day" and are *expensive to maintain*? Learn how easily you can replace them with up-to-the-minute equipment that delivers the full advantages *you should be getting* from modern mechanical dishwashing:

The maximum of cleanliness and sanitation—clear, sparkling glassware, china and silver . . .

Speedy, smooth, continuous operation—eliminating congestion and confusion . . .

Reduced labor cost; minimum consumption of electricity, water, towels and washing compound . . .

Protection against chipping and marking.

SPECIAL, EASY PAYMENT Plan for a limited time, makes **NOW** the time to check your dish pantry! Let your savings pay for a new Hobart-Crescent!

MORE INFORMATION

HOBART **ELECTRIC KITCHEN Machines**

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Mixers | <input type="checkbox"/> Air Whip Attachment for Mixers |
| <input type="checkbox"/> Dishwashers | <input type="checkbox"/> Glasswashers |
| <input type="checkbox"/> Slicers | <input type="checkbox"/> Food Cutters |
| | <input type="checkbox"/> Potato Peelers |
| | <input type="checkbox"/> Air Whip Unit |

THE HOBART MFG. CO., 1004 Penna. Ave., Troy, Ohio

Please send new book, "Hobart Kitchen Machines," free. I have checked machines in which I am interested.

NAME

STREET

CITY AND STATE

REGIONAL NEWS

Eastern States

CONNECTICUT

Storrs. — A fire safety program put into effect at Connecticut State College includes the installation of a sprinkler system in Storrs Hall, a freshman dormitory with wooden floors; a two-floor sleeping porch addition to the Gamma Sigma house in order that the attic dormitory may be vacated, and the construction of exits and fire escapes in three classroom buildings and seven faculty and student residences.

NEW YORK

Albany. — The legislative committee of the New York State Teachers' Association introduced a bill into the state senate providing for the extension of tenure laws to cover teachers in districts of more than 4,500 inhabitants and employing a superintendent of schools.

Brooklyn. — The board of higher education recently granted part of the Brooklyn College Wood-Harmon tract to the sinking fund commission to be used for a high school. The new school will probably be named the Midwood High School and its construction costs are estimated at between \$1,500,000 and \$2,000,000.

Canaan. — Because its water was obtained from the mountains through a gravity feed system and there was no way in which a pumper could be attached, the trade school building at the Berkshire Industrial School for Boys was destroyed in a spectacular fire which lasted for several hours and resulted in a loss of all the equipment used in teaching manual training, auto mechanics and barbering.

New York City. — As soon as a transfer of \$110,000 within the school board's budget has been formally approved, a research program, which is to include a series of experimental and demonstration schools, will go into effect. It is estimated that 85,000 elementary school pupils will be affected by the research program in its first year, when it will be largely confined to these schools. The research bureau is to function in three divisions: curriculum research and experimentation; educational tests and measurements, and instructional research.

PENNSYLVANIA

Carlisle. — Moving pictures of the ground-breaking ceremonies of the new Letort twelve-room grade school building will be taken for use in the school

centennial celebration to be held this summer.

Corry. — The three possible solutions to the problem of the vocational high school, located in a rented building since the Hatch school building was condemned, were recently presented to the citizens of Corry by their board of education together with cost explanations. They are: to build a new school on the Hatch site; to continue to pay rent for a building in which all of the school's equipment cannot be used, or to discontinue the school altogether throwing the pupils into the already crowded academic and business high schools.

Rouseville. — A union school for pupils from Rouseville and Cornplanter townships has been proposed. Under the outlined plan, an addition will be built to the present Rouseville school and a senior high school added to the curriculum.

Middle Western States

INDIANA

Indianapolis. — The special building committee has recommended that an \$800,000 classroom building be erected at the Arsenal Technical High School to be named the Milo H. Stuart Memorial Hall in honor of the man who developed the school and was its principal from 1916 to 1930. Mr. Stuart, from 1930 until his death in 1933, was assistant superintendent of schools in charge of secondary education.

IOWA

Ames. — The municipal court here handed down a ruling in a case that grew out of an attempt to force a parent to send his child of compulsory school attendance age to an ungraded or opportunity room. The court decided: (1) that the board cannot force a parent to send his child to such special school; (2) that the board does not have authority to establish such special school. The court held that "Chapter 214 of the code sets out specifically what may be taught. It prescribes the courses of study. We take it to describe what is known as the common school. It apparently leaves nothing to the discretion of the directors." The decision is being appealed to the supreme court.

Independence. — A library of primers, preprimers and other simple reading material is being assembled by the county superintendent, Dayton Winter, to be loaned to rural teachers in a plan that will permit each pupil to read four or

five preprimers before starting the primer, and several primers in preparation for the first reader.

Onawa. — Individual instruction in geometry has been found to be most successful by J. P. Weisensee, superintendent of schools here. Time is taken for group instruction and explanations after which each pupil travels his own pace. When a pupil has completed a unit he checks it carefully with the instructor before passing on to the next.

KANSAS

Bethel. — News reel photographers recorded the pupils of Washington Rural High School in the process of being finger-printed when a campaign to finger-print all of the pupils in Wyandotte County for identification purposes was begun with the parents' permission.

Pittsburg. — The music organization of some Southeastern Kansas high school is the guest of honor at each symphonic concert in the monthly Sunday afternoon series given at the Kansas State Teachers College, under the direction of Walter McCray, director of the school of music at the college.

Topeka. — The Kansas Safety Council is compiling a list of all schools in the state that have moving picture machines and the sizes of the machines, in order that films to be used in safety instruction may be distributed.

MICHIGAN

Ann Arbor. — A European study tour, under the direction of Elmer D. Mitchell, professor in the school of education, is being offered to graduate students in education by the University of Michigan. Six hours of graduate credit will be given to those completing the course. The trip will extend from June 27 to September 1.

Detroit. — Included in a supplementary budget approved by the board is a \$15,000 appropriation to pay the Detroit Symphony Orchestra for concerts it gives each year for the pupils in the city schools. These concerts have been given for thirteen years without charge.

Flint. — For the fourth successive year teachers of automotive mechanics in high schools and colleges will be offered instruction during the summer at the General Motors Institute. Two similar sessions of four weeks each are scheduled, the first opening June 29 and the second July 27.

Holland. — Reforestation work is a part of the regular biology course at the high school, which has forty acres of land that was given to it by a Holland resident for this purpose. Seedling trees are obtained from the state conservation department at no cost and are planted by the pupils, who make all-day trips for this purpose.

RESEARCH BUILT IN THE LABORATORY

Nesbitt Syncretizers for classroom heating and ventilating have a background of years of experience in daily operation in schools all over America. They are built first in the research laboratory and given every conceivable scientific test by a staff of engineers whose entire efforts are devoted to the design and manufacture of school room heating and ventilating.

TESTED IN ACTUAL SCHOOL OPERATION

Research alone is not sufficient—our engineers must know how they'll operate under actual school conditions. Test installations are made—checked hourly, daily and weekly, under all conditions, to give you the ideal heating and ventilating system for your school.

NESBITT SYNCRETIZER

FOR CLASS ROOM
HEATING AND
VENTILATING

Sold by
AMERICAN BLOWER CORPORATION

Eliminate drafts by maintaining a minimum air-stream temperature; prevents overheating and odors by continuously supplying outdoor air; provides scientifically correct indoor air with the maximum fuel economy. Write or phone for details.

AMERICAN BLOWER CORP.

6000 RUSSELL STREET • DETROIT, MICH.
BRANCH OFFICES IN ALL PRINCIPAL
CITIES • Division of American
Radiator & Standard Sanitary Corporation

NEBRASKA

Ashby. — A series of weekly motion pictures are being sponsored by the school system as a means of raising money for the purchase of such a machine. The program, which is given every Thursday night, consists of a feature, a comedy, an educational picture and vaudeville presented by the high school pupils.

Norfolk. — Thirty-one of the eighty teachers employed here received \$50 salary increases starting this semester.

Verdigris. — An innovation in the school is a recreation room where pupils may gather in the morning, during the noon hour and after school and play table tennis, chess, checkers and other games. This room has solved the problem of commotion and congestion in the halls. It is sponsored by the Future Farmers of America and the vocational agriculture instructor.

OHIO

Logan County. — A new form of report has been adopted for the first and second grade pupils based on a plus or minus grade for satisfactory or unsatisfactory work and using no letter grades. These reports will be issued every two months or oftener, if it seems advisable.

Sandusky County. — A motion picture projector was recently purchased by the Schoolmasters' Club for the use of the county schools.

Southern States

ALABAMA

Palmer. — Model schools to serve as community centers are to be erected here and in Gardendale and Greenwood in connection with the homestead developments under the direction of the Federal Resettlement Administration. The schools will have day nurseries, adult education classes and 4-H clubs, while their auditoriums will be large enough for community mass meetings.

MISSISSIPPI

Jackson. — Immediate cessation of work on four vocational schools located in Brookhaven, Philadelphia, Columbia and Lumberton was ordered by Harry L. Hopkins, WPA administrator, according to the *New York Times*, when he discovered truth in the charges that they were really factories. The municipalities constructing these schools, it was charged, had made contracts with textile firms for the use of the buildings and in one case for its sale at less than one-third of its cost.

SOUTH CAROLINA

Columbia. — High winds damaged badly the roofs of fifty-five school buildings in the state, according to F. C. Robinson, secretary of the state sinking fund commission, who estimated the damage at more than \$5,000. The damaged

schools were located in all sections and most of the damage was traceable to poor roofs. A Negro school in Chester County was blown from its foundation.

TENNESSEE

Chattanooga. — Someone miscalculated on the addition for the Hardy Junior High School and it has now become evident that the addition as planned is six and a half feet too wide for the property allotted. The city is being asked to purchase the needed space.

Jackson. — A further PWA allotment of \$6,000 will permit the installation of a heating system in the Negro high school which was cut out of the original plans in order to stay within the amount allotted by the PWA authorities for construction.

VIRGINIA

Lexington. — Metal fire escapes are to be erected on all two-story school buildings in the county not now equipped with them. This move followed the fire at Selma School near Clifton Forge in which a number of pupils were injured. The escapes are to be added to schools at Goshen, Rockbridge Baths, Brownsburg, Collierstown, Palmer, Glasgow, Mountain View, Denmark, Highland Belle, Lavesia, Raphine and Natural Bridge.

WEST VIRGINIA

Spencer. — The pupils of the high school, aroused over the condition of their building as revealed in an inspector's report to the state labor commissioner, are publishing a series of letters addressed to the citizens of Roane County, in the local paper, in which they set forth the results of the inspection in an appeal for a new building. The pupils have the cooperation of the faculty, the alumni association, the parent-teacher association, the board of education and the county superintendent of schools in this attempt to publicize their needs.

District of Columbia

Washington. — Recommendations for school projects are being temporarily shelved while the house subcommittee on appropriations in charge of the 1937 District appropriations bill discusses the subject of communism and its alleged inroads into the public schools. . . . A bill introduced in the first session of the 74th Congress would authorize the use of federal funds in an amount not to exceed \$3,000,000 annually to make school facilities available, where they are not now available, to children residing on federal government property or reservations. Funds would be apportioned to the states and territories on an objective basis for administration by state or territorial school officials.

Western States

ARIZONA

Phoenix. — A model home is being constructed at the Phoenix Union High School by the school authorities in conjunction with the Federal Housing Administration.

CALIFORNIA

Sacramento. — Originating in the crisis that confronted public education in the state in 1919 and 1920, Public Schools Week will this year be observed for the seventeenth time during the week of April 27. A bulletin containing basic information regarding the state school system is being published by the state department of education.

San Diego. — A \$30,474 earthquake rehabilitation program that will include almost every elementary school building in the city is being planned by Kistner and Curtis, architects, at the request of the board. Most of the work will concentrate on the removal of such hazards as parapets, overhanging ornaments and chimneys and the bracing of fire walls and improvement of doorways.

OKLAHOMA

Oklahoma City. — The state board of affairs in cooperation with the parent-teacher association has provided for the repairing of shoes belonging to needy children at state institutions.

Sand Springs. — In compliance with the request of J. Edgar Hoover, head of the department of justice, the journalism department in the high school is fingerprinting all the pupils enrolled in the school. The cards will be used for identification purposes only.

Stroud. — The speech department of the high school held what is believed to be the first poetry festival in the state recently. Eleven high schools took part in the program which is to be made an annual affair.

OREGON

Eugene. — The last of four research problems undertaken by the University of Oregon, a study in the appreciation of music, will be completed through a grant of \$2,250 from the Carnegie Corporation. Approximately \$35,000 has been received from Carnegie for this project.

TEXAS

Austin. — An ordinance to annex 57.88 acres of land east of the city limits in order to bring the new Rosewood school building being erected for Negro pupils into the city was recently introduced.

Brownsboro. — A temporary five-room structure is being erected to house the pupils of the Brownsboro School, which was recently destroyed by fire. It is planned to erect a permanent building during the summer vacation.

The IRWIN Line

Offers You these Important Advantages

—the exact type of seating to meet your individual needs—construction of the finest, most durable materials to withstand severe usage—scientific design to assure comfort and promote correct posture—many important patented superiorities—the benefit of a valuable FREE Planning Service—and a price to meet your budget. Catalog on Request.

IRWIN SEATING COMPANY, GRAND RAPIDS, MICHIGAN

Seating Specialists for Over a Quarter Century

New York Office, 381 Fourth Ave. . . . Territorial Distributors Throughout U. S. A.



Auditorium
Chair No. 17

The IRWIN line includes a complete range of auditorium chairs, including comfortable, durably constructed plywood back and seat models to units with insert panel backs and box spring seats. There is the widest possible choice of color schemes and there are prices to fit the most restricted appropriations.



No. 192



No. 164

PPROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

HYNISON, WESTCOTT & DUNNING, INC.
Baltimore, Maryland



After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935) **MERCUROCHROME, H. W. & D.**
(Dibrom-oxymercuri-fluorescein-sodium)

Outlines Progress Made in Use of One-Reel Films

The production of one-reel pictures from the finest full length photoplays produced in recent years is the experiment undertaken by the Committee on Social Values in Motion Pictures as outlined by Howard M. LeSourd, dean of the graduate school of Boston University, at the recent convention of the National Education Association.

Selected for behavior patterns as stimuli for thought and discussion, these one reelers, through careful editing and cutting, retain their entertainment value while pointing toward personality training and personal adjustment. The series is known as "The Secrets of Success" for it attempts to reinterpret success in terms of social values.

Discussion Guide for Each Film

A discussion guide has been prepared by the committee to accompany each film and to enable the teacher to stimulate the viewing groups, through well directed questions, to think constructively on the problems presented or suggested by the picture. For example, why did the boys jeer at Huckleberry Finn after school? What made white-washing play to the boys but work to Tom in Tom Sawyer? Is respect for war heroes in Tom Brown of Culver out of proportion to the respect due, say, those men who made equal sacrifices in ridding the world of disease?

"Thus far," says Dean LeSourd, "we have completed and put into circulation twenty of these pictures, and the enthusiastic response from religious leaders, from educators, from psychologists and also from the thousands of children who have already seen these pictures greatly encourages the committee."

Three Problems to Be Faced

Three problems in the use of these pictures have been encountered: the training of children and young people to take part in a socialized recitation; the training of teachers in the technique of socialized recitation and discussion, and the numerous schools unequipped for 35-mm. sound films.

"Lessons From the Movies," a department appearing in a monthly bulletin, *The Motion Picture and the Family*, published by the Motion Picture Producers and Distributors of America, is written by Dean LeSourd in an effort to show how outstanding pictures may be used by character developing agencies of all types as a basis for discussion, thus correlating the short subjects used in the classroom with the photoplays children see in the theaters.

Visual Education Conference

The National Conference of Visual Education and Film Exhibition, formerly the DeVry summer school of visual education, is meeting in Chicago June 22 to 25. The scientific principles and mechanics of sound units will be explained at the sessions.

Surveys Field of Visual Education

An exhaustive survey of visual aids in education is being conducted by the Office of Education and financed in part by the American Council on Education. Twenty thousand superintendents will be interviewed before the data are compiled and published. It is hoped that a comprehensive picture of the status of visual education will result from the survey. Dr. Cline M. Koon, senior specialist in radio and visual education of the Office of Education, is directing the work.

Government Financing Proposed

A proposal that the government of India and the provincial governments appropriate funds for the production of educational films has been made by the Motion Picture Society of India, which has sponsored the production of this type film.

800 Teachers Contribute to Visual Aid Handbook

A timely handbook of information is "Visual Aids in the School," compiled by the committee on visual aids of the New York State Association of Elementary Principals. Over a period of three years the committee has been collecting, tabulating and organizing the material contributed by more than 800 teachers in more than 100 communities.

Part I deals with visual aids for the asking and making, such as the school journey, charts, graphs, pictures and picture collections and the object-specimen-model. Part II considers the blackboard, lantern slides and stereographs, maps and globes and motion pictures. This handbook is being distributed by Rollin W. Thompson, principal of the Roscoe Conklin School, Utica, N. Y.

Visual Education Demonstrated

A visual education demonstration was presented to the Parent-Teacher Association of the schools at Wauneta, Neb., recently. A film strip of France was shown and a demonstration of teaching devices using the film was given by the fifth grade geography class. The instructor in biology ran two reels of "How Life Begins," explaining how he presents it to his class.

Films for the School Screen

VIII—Spain

Granada and the Alhambra—Famous center of a thousand legends of the Moor of Spain. 1 reel. 16 mm., silent. For rent. Institutional Cinema Service, Inc., 130 West 46th Street, New York City.

Barcelona to Valencia—Various picturesque towns along the Spanish Mediterranean Coast. 1 reel. 16 or 35 mm., sound or silent. For rent or purchase. Fitzpatrick Pictures, Inc., 729 Seventh Avenue, New York City.

In Old Madrid—Modern Spain contrasted with quaint Salamanca. 1 reel. 16 mm., sound. For rent or purchase. Bell and Howell Company, 1810 Larchmont Avenue, Chicago.

From Granada to Toledo—Historic Southern Spain. 1 reel. 16 or 35 mm., sound or silent. For rent or purchase. Fitzpatrick Pictures, Inc., 729 Seventh Avenue, New York City.

A Mediterranean Mecca—Palma de Mallorca, known as the land of sunshine and charming people; the largest of the Balearic Islands. 16 and 35 mm., sound and silent. For rent or purchase. Imperial Distributing Cor-

poration, 729 Seventh Avenue, New York City.

The Snow Bound Pyrenees—Peaks and valleys of the Pyrenees. 1 reel. 16 mm., silent. For rent or purchase. Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago.

Glory of Spain—City of Cordova. 1 reel. 16 mm., sound. For rent or purchase. Frederick L. Gerke, 45 West 45th Street, New York City.

Toledo and Segovia—Old Roman aqueduct, churches, monuments, streets and structures of old cities. 16 mm., silent. For rent or purchase. Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago.

Gypsy Melodies—Spanish gypsy tunes. 1 reel. 16 mm., sound. For rent or purchase. Hollywood Film Enterprises, Inc., 6060 Sunset Blvd., Hollywood, Calif.

Gypsy Troubadours—Companion picture of Gypsy Melodies, with different songs and Spanish dances. 1 reel. For rent or purchase. Hollywood Film Enterprises, Inc., 6060 Sunset Blvd., Hollywood, Calif.

FREE!

FOR THE ASKING



AND
IT MAY
SAVE YOU HUNDREDS OF DOLLARS
IN FLOOR MAINTENANCE COSTS

*The following types of floors
are included in this booklet:*

UNPAINTED WOOD

LINOLEUM

CEMENT, CONCRETE
OR CORK

RUBBER TILE OR
RUBBEROID

SOFT ASPHALT
COMPOSITION OR
SOFT MASTIC TILE

MAGNESITE OR
HARD MASTIC

PAINTED OR VARNISHED
SURFACE

TERRAZZO

MARBLE

FAIENCE TILE

SLATE OR QUARRY

GARAGE FLOORS

WASHROOM FLOORS

CELLAR FLOORS

GYMNASIUM,
ARMORY OR
DANCE FLOORS



WEST DISINFECTING COMPANY

DEPT. C, 42-16 BARN STREET, LONG ISLAND CITY, NEW YORK
Branches in 55 Principal Cities

LARGEST ORGANIZATION OF ITS KIND IN THE WORLD



THIS
DESK *Encourages*
CLEANLINESS!

The Heywood-Wakefield Sanitary Pedestal Desk Set (shown above) was purposely and practically designed to encourage classroom cleanliness . . . to make it easy for the pupil and janitor to maintain orderly, neat rooms. The single base underneath desk and chair leaves a greater floor area noticeable to the pupil who thereby is less apt to litter the floor with scrap paper. The same simple underconstruction makes it easier and quicker for janitors to sweep and maintain classroom cleanliness. This Heywood-Wakefield unit is available in both adjustable and non-adjustable types. It may be fitted with lifting lid or open front desk boxes. If you are considering seating for a new school or for rehabilitating an older building, may we tell you more in detail about this practical, modern school desk? At any time we shall be pleased to demonstrate the many advantages in the complete line of Heywood-Wakefield School Furniture.

HEYWOOD-WAKEFIELD

MAKERS OF FINE SCHOOL FURNITURE

174 PORTLAND ST., BOSTON, MASS.

Sales Offices in 28 Principal Cities

Forty Nations Participate in Worldwide Broadcasts

While war clouds hovered darkly in the sky and diplomats talked of embargos and sanctions and treaties, a group of men met in Paris, as representatives of the peoples of forty nations, and organized the International Broadcasting Union. This organization will present semiannual programs to be broadcast over the largest radio network ever arranged by world broadcasters.

The first of these concerts will be broadcast from New York City next fall, under the joint auspices of the National and Columbia broadcasting systems. It will be thirty minutes long and will consist of music that is characteristically American. At the request of the foreign delegates, a portion of the program will be devoted to Negro folk songs and spirituals.

The Argentine Tango Congress in Buenos Aires will be the source of the second concert scheduled for February.

These Teachers Regularly on the Air

Five Wisconsin school teachers have turned their hands to broadcasting and are doing regular series on the Wisconsin School of the Air. Earl E. Welch, former principal at Stoughton, does a course entitled "American Problems" for high schools, Lois Buswell of Rhineland, writes "Gems of Literature" for high schools. Helen Cotts of Hartford writes "Exploring Distant Lands" for intermediate grades. Two Madison teachers, Carrie Rasmussen and Mrs. Fannie Steve, do "Story Time for Little Folks" and "Rhythm and Dramatic Games," both for primary grade children.

Builds Power Speaking Set

The Vinton High School radio club, Vinton, Iowa, built a power speaking set in the school laboratory which is used to announce plays and to utilize records in place of band numbers at football games. It serves the same purposes at basketball games and has been used on the streets to advertise school and community activities. The set cost the school club less than \$60 to build.

Citizen and His School Program

A program dovetailing the interests of the citizen and his school is now being broadcast over station KOAC, the state-owned station operated by the general extension division of the Oregon State System of Higher Education with talent drawn from Oregon State College, the university and normal schools.

On the Air During April

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Standard except when otherwise specified.

Daily

National Farm and Home Hour¹—12:30-1:30 p.m. (NBC-WJZ).

Wilderness Road²—5:15-5:30 p.m. (CBS).

Monday

American Education Forum—2:00-2:30 p.m. (NBC-WEAF).

History Series—2:30-3:00 p.m. (CBS).

April 6—Seattle.

April 20—Omaha.

April 27—Denver.

Education in the News, Office of Education—7:30-7:45 p.m. (NBC-WEAF).

Tuesday

Your Child, Dr. Ella Oppenheimer, Children's Bureau, U. S. Department of Labor—11:15-11:30 a.m. (NBC-WEAF).

Treasure Trails in Art Series—2:30-3:00 p.m. (CBS).

April 7—Silversmithing for His Country: Paul Revere.

April 28—The Potter Who Persevered.

Literature Series—2:30-3:00 p.m. (CBS).

April 21—The Enchanted Soldier.

Science Service Series—4:30-4:45 p.m. (CBS).

Understanding Opera—6:35-7:00 (CBS).

Medical Emergencies and How They Are Met, dramatized program with incidental music, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).

April 7—Middle Age, Dr. W. W. Bauer, director, bureau of health and public instruction, American Medical Association.

April 14—Summer Camps, Dr. Morris Fishbein, editor, *Journal of the American Medical Association* and of *Hygeia*.

April 21—Health and the School, Dr. Morris Fishbein.

April 28—Infant Care, Dr. W. W. Bauer.

You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).

April 7—A Socialist Looks at the Constitution, Norman Thomas, director, League for Industrial Democracy.

April 14—Getting a New Constitution, W. Y. Elliott, professor of government, Harvard University.

April 21—The Constitution and the States, Albert C. Ritchie, former governor of Maryland.

April 28—A Unified Economy and States Rights, James Hart, professor of political science, Johns Hopkins University.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).

April 1—Neighborhood Playmates and the Development of Social Behavior, Leonard Cottrell, Cornell University.

April 8—Supervised After-School Play, Charles H. McCloy, research professor in anthropology and physical education, University of Iowa.

April 15—The Home Workshop, Louis Newkirk, director of handwork, Chicago Public Schools.

April 22—Function of Recreation in Character, Weaver Pangburn, director of publicity, National Recreation Association.

April 29—The Farm Club in the Development of Youth, C. W. Warburton, director of extension work, U. S. Department of Agriculture.

Geography Series—2:30-3:00 p.m. (CBS).

April 1—New Orleans and the Mississippi Delta.

April 8—Puerto Rico, a Crowded Island.

April 22—Peru of the Andes.

April 29—The Much-Fought-For Gran Chaco.

Youth Today, auspices of the National Student Federation—4:00-4:15 (CBS).

Our American Schools, directed by Belmont Farley—7:45-8:00 p.m. (NBC-WEAF).

The Cavalcade of America, dramatization of significant moments in American History—8:00-8:30 p.m. (CBS-WABC).

Thursday

Music Appreciation Series, Standard School Broadcasts,³ 11:00 a.m.-12:20 p.m. (elementary); 11:25-11:45 a.m. (NBC).

Music and Elementary Science Series—2:30-3:00 p.m. (CBS).

April 2—Music in Louisiana, and The Beginning of Science.

April 9—The Story of Easter (Primary), and People Learn How to Make Steam Work for Them.

April 23—South America (Intermediate), and People Learn How to Use Electricity.

April 30—Songs from Alice in Wonderland, and The Centuries That Are to Come.

Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).

America's Town Meetings—9:30 (NBC-WJZ).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch, Series A and C—11:00 a.m.-12 m. Series B & D—11:30 a.m.-12:20 p.m. (NBC-WEAF, WJZ).

Vocational Guidance and Current Events Series—2:30-3:00 p.m. (CBS).

April 3—"Spare Tire" Vocations.

April 24—You Can't Rely on Pull.

Magic of Speech—2:00-3:00 p.m. (NBC-WEAF).

General Federation of Women's Clubs Series—2:45-3:00 p.m. (NBC-WJZ).

Saturday

Our American Schools, directed by Florence Hale—11:00-11:15 a.m. (NBC-WEAF).

Cincinnati Conservatory of Music—11:00 a.m.-12 m. (CBS).

Your English—3:00-3:15 p.m. (NBC-WJZ).

Boston Symphony Orchestra—8:15-9:10 p.m. (NBC-WJZ).

Sunday

University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).

Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m. (CBS).

Philharmonic Symphony Society of New York, Arturo Toscanini, director—3:00-5:00 p.m. (CBS).

Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).

General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

¹Except Sunday.

²Except Saturday and Sunday.

³Pacific Coast stations only.



HILLYARD'S

SPECIAL GYM FINISH . . . SUPER SHINE-ALL
ONEX-SEAL HIL-BRITE

Nationally Endorsed

Special GYM FINISH . . . STANDS ABUSE . . . SUPER TOUGH . . . LONG WEARING . . . NON-SKID . . . NO GLARE . . . EASILY CLEANED . . . ECONOMICAL

Super SHINE-ALL . . . Cleans, Polishes, Preserves all types of floors, TILE, MARBLE, TERRAZZO, CEMENT, SLATE, ASPHALTIC TILE and COMPOSITION FLOORS. Is economical to use. . . Just one ounce to a gallon of water for ordinary cleaning.

ONEX-SEAL . . . Approved for Sealing, Waterproofing and Polishing TERRAZZO, MARBLE, TILE, SLATE. Becomes an integral part of the surface. Protects floor from ACID, WATER, DIRT and TRAFFIC.

HIL-BRITE . . . Self Polishing Wax . . . No Buffing, No Rubbing, Saves TIME, LABOR and EXPENSE.

AND A FULL LINE OF OTHER QUALITY PRODUCTS . . . CATALOG FREE

HILLYARD CHEMICAL CO.

BRANCHES IN
PRINCIPAL CITIES

ST. JOSEPH,
MISSOURI

SHINE-ALL SALES CO.
DISTRIBUTORS

Special
GYM FINISH
Super
SHINE-ALL
ONEX-SEAL
HIL-BRITE



AS MODERN AS TOMORROW



*as well
built
as
furniture
can be*

This inspiring executive desk in medium dark brown walnut is worthy of the finest of offices. Chairs are covered with genuine top grained, snuffed leather.

The design of both chairs and desk has been especially planned in the contemporary modern manner for the business executive who desires the swift moving, energetic lines which forecast the style and vogue of tomorrow.

The GUNN line of desks and equipment for schools is stand-

ard with many of the Nation's most advanced educational institutions. It consists of desks for teachers, students art desks, mechanical drawing desks and cases, domestic science equipment, cafeteria, class-room, kindergarten and library furniture.

It will be a pleasure to have our Engineering Staff furnish details showing adaptable suggestions and complete costs for your individual needs. We invite you to submit specifications and installation requirements.

GUNN FURNITURE COMPANY Established 1889 **GRAND RAPIDS, MICHIGAN**

NAMES IN THE NEWS • • •

Eastern States

PROF. WILLIAM STERN, formerly director of the Psychological Institute, Hamburg, Germany, will give a course on the psychology of childhood and youth at the Harvard Summer School. Other outside professors include DR. PAYSON SMITH, former commissioner of education for Massachusetts; JAMES D. MCCALLUM, Dartmouth; HARRY A. OVERSTREET, College of the City of New York; ELIOT JONES, Stanford; F. STUART CHAPIN, Minnesota; DR. DOUGLAS A. THOM, Habit Clinic for Child Guidance, Boston; FREDERICK NUSSBAUM, Wyoming, and ROBERT WITHERINGTON, Smith.

ROBERT ERNEST DOHERTY, dean of Yale's School of Engineering, has been made president of Carnegie Institute of Technology, Pittsburgh. Dean Doherty has been closely identified with electrical engineering for many years.

WILLIAM H. BRISTOW, director of the bureau of school curriculum for the Pennsylvania state department of public instruction, from 1931 to 1936, has been appointed general secretary of the National Congress of Parents and Teachers with headquarters in Washington, D. C.

DR. FRANK P. GRAVES, New York State commissioner of education, received the medal awarded annually by the Academy of Public Education for distinguished service to education in the state.

DR. PAYSON SMITH, formerly commissioner of education for Massachusetts, has accepted a special assignment in the field of elementary and secondary education for the American Council on Education.

DR. BURDETTE R. BUCKINGHAM, formerly of Ohio State University and recently a lecturer at Harvard and editor for Ginn and Company, has been admitted to partnership in that firm as of January, 1936.

DR. AUGUSTUS S. DOWNING, former first assistant commissioner of education in New York State, died recently. He is credited with the state scholarship law and the medical practice act.

MRS. FLORENCE I. GAY is succeeding DR. BURR JONES as supervisor of elementary education in Massachusetts.

WALLACE ORMSBY has been elected superintendent of schools for the fifth supervisory district of Cattaraugus County, New York, to complete the unexpired term of A. W. HARKNESS.

KATHERINE O'DEA has been appointed

supervisor of junior high school grades at Scranton, Pa., to succeed the late HAZEL SMEAD.

DR. JAMES GILBERT RIGGS, principal of the Oswego State Normal School, Oswego, N. Y., died at the age of 74. Doctor Riggs was a former president of the New York State Historical Association.

ROBERT A. WILLSON, supervising principal of the Addison High School, Addison, N. Y., for sixteen years and a teacher of science and mathematics for twenty-one years, has announced his resignation, effective at the end of the school term.

J. PAUL BURKHART, principal of the schools at Peters Township, Franklin County, Pennsylvania, has been made assistant superintendent of schools at Cumberland County where he succeeds the late A. LEE SCHULENBERGER.

GEORGE R. FAINT, registrar, has been appointed acting director of Bucknell Junior College, Lewisburg, Pa., to succeed JOHN H. EISENHAEUER, who resigned to accept the principalship of Reading High School, Reading, Pa.

IRVING O. BRAGG, superintendent of schools at Eastport, Me., died in a hospital in Manchester, N. H., following an operation. Before coming to Eastport, Mr. Bragg had organized the Aroostook State Normal School, Presque Isle, Me.

W. RAY SMITH, supervising principal of the Van City High School, Van, Pa., resigned in order to join the staff of the state department of public instruction.

PETER CANNICI, JR., teacher in the Washington Park School, Moonachie, N. J., has been appointed principal to succeed Mrs. GENEVIEVE DE WOLF.

Western States

KARL W. ONTHANK, dean of personnel at the University of Oregon, has taken over the duties of state director of the National Youth Administration, succeeding PAUL JACKSON, who recently resigned to become head of the Indian school at Salem, Oregon.

DR. EDWIN D. STARBUCK, director of the institute of character research, University of Southern California, was presented with a fund to be used for the publication of an anthology of literary works that emphasize the vital points of his educational philosophy, as a seventieth birthday gift. Friends, associates and students taught by Doctor Starbuck during the last thirty-five years contributed to the fund.

E. E. BROWN, former president of Southwestern State Teachers College, Weatherford, Okla., and later president of Ferris Institute, Big Rapids, Mich., has been elected president of Northwestern State Teachers College, Alva, Okla.

DR. ROCKWELL D. HUNT, dean of the graduate school at the University of Southern California, has begun publication of a bimonthly bulletin, *Research News*, in which research projects of the faculty and students of the graduate school are reviewed.

CLAUDE A. GIST, superintendent of schools at Drummond, Okla., resigned recently to enter business. DAVID MITCHELL, high school principal, has been appointed to succeed him, and MILDRED SIMMONS, English teacher, has been made principal.

TIREY WILEMON, principal of Waxahachie High School, will succeed G. B. WINN as superintendent of schools at Waxahachie, Tex. Mr. Winn has been connected with that school system since 1898, becoming superintendent in 1909, and it was during his term that all the present school buildings were erected and vocational courses added. BRAGG STOCKTON, a teacher in the high school, will become principal.

ALLEN D. FITCHETT, county superintendent of schools at Noble County, Oklahoma, is the new principal at Yukon, Okla., where he succeeds FRANK OVERMAN who has been made assistant county superintendent of Oklahoma County. Mr. Fitchett was at one time president of the Northern Oklahoma Education Association.

DR. JOSEPH MARR GWINN, one time superintendent of schools for San Francisco, has been appointed acting head of the department of teacher training at the San Jose State College during the leave of absence of DR. GEORGE E. FREELAND.

ROBERT E. BENNETT, superintendent of schools at Chehalis, Wash., died recently, following a heart attack. J. D. GLANN, high school principal, has been temporarily appointed city superintendent.

E. H. HOMBERGER, superintendent of schools at Woodward, Okla., has announced his resignation to be effective June 30. J. T. WILLIAMSON, Edmond, has been named his successor.

A. C. BARKER, superintendent of schools at Palo Alto, Calif., for sixteen years, has announced that he will not be a candidate for the position at the close of his term in June. Mr. Barker has passed the usual age of retirement.

ROGER S. PHELPS, superintendent of schools at Antioch, Calif., has announced that he will retire at the close of his present term, June 30.

OTIS E. WILSON, principal of Yreka



**The ONLY
FLOOR MACHINE**
That Sands
Steelwools • Polishes

**USE IT for 5 DAYS
AT OUR EXPENSE**

For polishing wood, linoleum, tile, and every other type of school floor, this time and labor-saving machine does a perfect job the first time over.

ESPECIALLY DESIGNED FOR SCHOOLS

IF you have not seen the new Lincoln-Schlueter Multi-Purpose Floor Machine in operation you can do so at our expense. Then, you will realize why hundreds of Schools are using this **ALL-PURPOSE MACHINE**. The day the Multi-Purpose enters **YOUR** School, floor maintenance routine becomes smoother, easier and more economical. It works right up to the quarter-round. Vacuum Dust Collector picks up all dust, dirt and steel wool—eliminates expensive hand labor. Operates from any convenient outlet. So simple anyone can operate it.

Write today for complete information about our
FREE TRIAL OFFER

LINCOLN-SCHLUETER
FLOOR MACHINERY CO., Inc.

228 W. Grand Ave.

Chicago, Ill.

VICTOR *Paces the field*

- with exclusive Projector and Sound Features



ANIMATOPHONE Model 25 \$360

LEADS THE FIELD IN PERFORMANCE AND REFINEMENTS AT LESS MONEY

16 mm **VICTOR**

16 mm ANIMATOPHONE embodies exclusive refinements that cannot be ignored... advantages that have made it the World's most widely used, most moderately priced sound picture reproducer. Only in ANIMATOPHONE, for instance, will you find **POSITIVE** Protection against Film Damage... **PERFECT** Simplification insuring trouble-free operation and maintenance... with decidedly superior sound and picture reproduction! Model 24 (A.C.) for classroom and **LARGE** Auditorium. Model 25 (A.C.-D.C.)... **World's** lightest and most compact... for classroom and *small* auditorium. Write for literature... Ask for Demonstration.

VICTOR ANIMATOGRAPH CORPORATION
DAVENPORT, IOWA :: New York City
Chicago — Los Angeles

Conveniently housed in two compact cases.



NEW! MODERN!

Atlas **METAL WORKING LATHES**



\$82⁵⁰
COMPLETE AS SHOWN LESS MOTOR

**MODERN DESIGN
MODERN CONSTRUCTION**

This new Atlas is an ideal metal lathe for the school shop—designed for accuracy and efficiency, and built to stand the wear of inexpert student use. Bed is 36" long. Has 10 1/4" swing, takes 18" between centers, and may be fitted with attachments for all machine shop operations.

Other new Atlas metal lathes priced from \$35.50 up. "Better to have several low-priced lathes and give more students a chance," say many shop teachers, "than one expensive model and a waiting line." Write today for latest catalog of metal and wood lathes, drill presses, tools and attachments.

ATLAS PRESS COMPANY
472 N. Pitcher St., KALAMAZOO, MICH.

Complete displays at 35 E. Wacker Drive, Chicago, 130 W. 42nd St., New York, 113 N. 3rd St., Philadelphia.

FEATURES

Self-contained counter-shaft and universal motor bracket. Threading range 4 to 96 per inch. 16 speeds from 28 to 2072 R.P.M. Heavy duty enclosed on-off switch. Automatic reversible power feeds. Threading dial. Graduated tailstock ram. Modern V-belt drive. New heavy cast iron gear guard. New threading chart. New design carriage. Laminated shims throughout. Heavy, new design compound rest. Well and pin for center lubricant. Scientific weight distribution.

ATLAS PRESS CO. 472 N. Pitcher St., Kalamazoo, Mich.
Kindly send your latest catalog.
Name.....
Address.....
City and State.....

High School, Yreka, Calif., has been elected superintendent of schools and principal of the Emeryville High School, Emeryville, Calif., to succeed JOHN H. NAPIER, JR., who has been appointed principal of the Placer County Union High School at Auburn, Calif.

Southern States

HARRY CLIFTON BYRD has been elected to the presidency of the University of Maryland, of which he has been acting president since last July when RAYMOND A. PEARSON resigned.

DR. FELTON G. CLAR, dean of the Southern University for Negroes, Scotlandville, La., is on a six months' leave of absence as regional director of Negro education in Alabama, Florida, Georgia, Mississippi, Tennessee and Southwest Kentucky.

NATHAN WILSON WALKER, head of the department of education of the University of North Carolina since 1921, died at the age of sixty-one. Professor Walker was superintendent of schools at Asheville, N. C., from 1903 to 1905, and president of the Association of Colleges and Secondary Schools of the Southern States in 1925 and 1926.

DR. NORMAN W. CAMERON, one time president of the West Chester State Teachers College and formerly superintendent of schools at Pottstown, Pa., has been elected acting superintendent of schools for Cecil County, Maryland, to complete the term of HOWARD T. RUHL, who resigned recently.

W. D. GRESHAM, state supervisor of Negro education for Virginia since 1919, died at his home in Richmond recently.

NICHOLAS BAUER, parish superintendent of schools, New Orleans, was elected president and S. T. NEVELN, superintendent of schools at Austin, Minn., secretary-treasurer of the Schoolmasters' Rotary Club at the annual meeting held during the St. Louis convention of the Department of Superintendence.

WILLIAM F. VAN BUSKIRK, deputy superintendent of the Connecticut State School for Boys, Meriden, has been appointed superintendent of the Waldo Burton Memorial School for Boys, New Orleans.

W. E. DERRICK has been named the new principal of the high school at Pineville, N. C., to succeed B. M. SQUIRES who resigned in order to enter business. MRS. JANET BOYLES, Steel Creek, N. C., will succeed Mr. Derrick as principal of the school at Oakdale, N. C.

J. L. McCASKILL, principal of the high school at Meridian, Miss., has taken a leave of absence in order to attend Peabody Institute, Nashville, Tenn. In his absence JOHN PEARSON, assistant principal, is acting principal.

Middle Western States

DR. LEO J. BRUECKNER, professor of elementary education at the University of Minnesota, is to direct a survey in New York State that will be a section of the regents' inquiry into the cost and character of education in the state.

DR. JOHN GUY FOWLKES, professor of education at the University of Wisconsin, has been appointed director of a study to be made of the reorganization of a long term public school program for the state.

LEONARD YOUNG, superintendent of schools at Duluth, Minn., since November, 1923, and a member of the school system since 1910, has submitted his resignation to the board to be effective on July 31. At the same time, M. E. ALLETZHAUSER, director of physical education in the schools for forty-five years, also resigned.

WILLIAM P. EVANS, principal of Rock Spring School, St. Louis, and at one time state superintendent of schools of Missouri, died at the age of seventy-five, after having been a member of the St. Louis school system for forty-eight years.

ERNEST T. CAMERON, for many years secretary of the Michigan Education Association, has accepted the position of educational director of the "Encyclopedia Americana," published by the Americana Corporation of Chicago.

JESSE M. SCUDDER, superintendent of

schools at Huntington, Ind., announced his resignation from that position to be effective August 1. CHARLES EMORY BYERS, completing his twenty-fifth year with the school system, has been named as his successor by the school board, who also appointed H. BURTON STEPHAN, principal of the Horace Mann School, principal of the high school, and named H. GLENN PRIDDY to succeed Mr. STEPHAN.

William J. Bogan Dies

William J. Bogan, superintendent of Chicago schools since 1928, died at his home of heart disease on March 24. Mr. Bogan's teaching experience was obtained



in the schools of Michigan and Chicago, and in 1905 he was appointed principal of Chicago's Lane Technical High School. He became assistant superintendent of schools in charge of high schools and evening schools in 1924, under William McAndrew, whom he succeeded.

Coming Meetings

April 2-4—California Secondary School Principals.
April 4—Indiana School Men's Club, Indianapolis.
April 6-9—Schoolmen's Week, University of Minnesota.
April 7-10—Pacific Northwest Association for Adult Education, Spokane, Wash.
April 9-11—Tennessee Education Association, Nashville.
April 11—California Teachers Association, San Francisco.
April 14-16—National Catholic Educational Association, Cathedral High School, New York City.
April 15-18—Kentucky Education Association, Louisville.
April 15-18—Eastern Arts Association, New York City.
April 16-18—Georgia Education Association, Macon.
April 18—Annual meeting of delegates, Massachusetts Teachers Federation.
April 22-24—Mississippi Education Association, Jackson.
April 22-25—North Central Association of Colleges and Secondary Schools, Chicago.
April 28-May 2—Association for Childhood Education, New York City.
April 30-May 2—Schoolmasters Club, University of Michigan.
May 8-9—Progressive Education Association, Regional Conference, Buffalo, N. Y.
May 11-13—National Congress of Parents and Teachers, Milwaukee, Wis.
May 18-21—American Association for Adult Education, New York City.
June 3-4—Indiana County Superintendents' Association, Indianapolis.

June 11-13—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.
June 16-18—Conference on Child Development and Parent Education, University of Iowa.
June 22-25—National Conference of Visual Education, Chicago.
June 25-26—Conference on Business Education, Chicago.
June 28-July 2—National Education Association, Portland, Ore.
July 6-17—Department of Elementary School Principals, National Education Association, Eugene, Ore.
July 6-9—American Home Economics Association, Seattle, Wash.
July 28-30—Superintendents' Conference, Pennsylvania State College.
Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.
Oct. 7-9—New Hampshire State Teachers Association, Littleton.
Oct. 8-10—Vermont State Teachers Association, Burlington.
Oct. 22-23—Indiana State Teachers' Association, Indianapolis.
Oct. 22-24—Mississippi Education Association, Jackson.
Oct. 29-30—Maine Teachers' Association, Lewiston.
Oct. 30—Connecticut State Teachers Association, Hartford.
Nov. 5-7—Iowa State Teachers Association, Des Moines.
Nov. 5-7—Minnesota Education Association, St. Paul.
Nov. 9, week of—Delaware State Education Association, Wilmington.
Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg.

*May the Easter
bunny bring you
health and happiness*

ONE way to happiness is health and an aid to good health is good teeth. Four factors that help teeth last a lifetime are: Right Food, Personal Care, Dentist's Care and plenty of Chewing Exercise. There is a reason, a time and place for Chewing Gum.

Today, manufacturers call upon great Universities to make impartial investigations of their products. Results of such research form the basis of our advertising.
The National Association of Chewing Gum Manufacturers

Q-21



THE AMERICAN SCHOOL TYPE CABINET No. 870

All the features of up-to-date composing room equipment are combined in this sturdy steel cabinet, with its two working sides, providing ample space to accommodate four pupils at a time.

Observe the combination pull and label holders on the full-size California job cases. They can be read from a standing position, and illuminated when necessary by an appropriate lighting fixture. The cabinet fronts on the cases make the cabinets dust proof.

Designed especially for school work, No. 870 has no superstructure to obscure the instructor's view. The lead and slug rack is located at the most convenient working height. The flush base makes it easier to keep the floor clean.

The Department of Education of the American Type Founders employs the services of Professional Educators, Efficiency Engineers, and trained Salesmen to aid you in organizing a Printing Course in your School.

*Everything needed in the School Printing
Laboratory*



No. 870. (In steel only)

This Cabinet is especially designed for Secondary Schools and Teacher Training Institutions. Floor space: 36x72 inches. Height, from floor to working edge, 40½ inches.

DEPARTMENT OF EDUCATION
AMERICAN TYPE FOUNDERS

Branches and Selling Agents in Twenty-five Cities

Types used: Century Schoolbook Family

Vol. 17, No. 4, April, 1936

83

NOTES FOR BUYERS . . .

Making Beds

A young couple on our street will have a sturdy console table, a cedar chest and a footstool even after they lose their other household goods in default of a few installments.

The first named objects are the young man's own handiwork, dating back to junior high school days. It is too bad he did not learn to make a chest of drawers and a bed. Certainly the bed he is lying in can't be too comfortable.

All this is by way of welcoming an old firm into a new field. After fifty-two years of experience in building industrial wood-working equipment, the Yates-American Machine Company of Beloit, Wis., is turning part of its attention toward small machines for the school shop. All the construction features that have proved themselves in industry are incorporated in the design of these school machines. They have modern lines, safety features and are adaptable for either bench or pedestal mounting.

Yellow

Chalk one up, if you please, for our friends, Binney & Smith, 41 East 42nd Street, New York City. That outfit doesn't cringe at cries of "Yellow," knowing that its new product is going to help the youngsters.

Those who know most about eyesight say that yellow chalk on a blackboard brings less eyestrain than the more glaring white. They also say that dust is about as bad as glare. This company's new dustless yellow crayon, like its popular white Anduseptic crayon, protects the schoolroom from that fog of powdered chalk which made the old-time schoolhouse resemble the dust bowl of Kansas.

Cold Wave

Those who passed the Severe Winter of '36 in anything like comfort can thank an overworked engineer or an automatic stoker. Most school engineers could scarcely spare the time from firing to answer the telephone demands for more heat. When the winter's coal tonnage was totaled, the budget was in the same exhausted state as the engineer.

We shall probably write to Superintendent Hall in Chaska, Minn., to see how his school fared. Along in December he said the school was into its third

season with an Automatic Butler Stoker, and had "enjoyed a constant temperature at all times." The school engineer was being utilized for other duties, because he did not have to pay close attention to firing. The building had been "comfortably heated on the coldest days." Moreover, there had been an annual net saving of more than 21 per cent in fuel.

If we find that the Chaska school children were as cosy as that all winter long, we shall certainly write the Butler Manufacturing Company, 13th and Eastern Avenue, Kansas City, Mo., for information on stokers. We're not going to perish another winter while Chaska is so smugly snug.

Solitude Preferred

Porcena walls do not a prison make, but they afford solitary confinement at those moments when the most social being prefers his own company.

Not wishing to trespass on the Chic Sale preserves, we shall merely suggest that Porcena is a trade designation for porcelain enameled panels, which make excellent toilet partitions for use in public schools.

These insulated partitions are an inch thick, can withstand rough usage, are easily divested of pencil and finger marks and come in a variety of colors that will make school toilets not only cheerier but more likely to appeal to pupil pride. The Sanymetal Products Company, Inc., 1699 Urbana Road, Cleveland, makes this thoroughly modern provision for physiologic retreat.

Five Little Stylists

This little stylist went to Paris. This little stylist stayed at home. This little stylist designed sandals. This little stylist created scandals. This little stylist cried: "Hee, hee, hee, you can't hang a thing upon me!"

Even if you haven't had rhythm in your nursery rhymes, you can guess our favorite among the five little stylists. He isn't actually a *little* stylist, ours; he goes in for industrial design. He has just made a door handle for lockers, the kind no pupil can hang towels or clothing or anything else on.

All-Steel-Equip Company, Aurora, Ill., called in this stylist, William A. Kendall, to design a handle that would follow true functional requirements rather

than precedence. He "styled" a handle that conforms to the line of the locker itself, is easy to grasp with thumb and forefinger and can't be used as a clothes hook. The new handle is only one of a number of improvements on the A-S-E lockers. The new lockers are available in every standard size and style, it is announced.

Woodland Echoes

If your school playground is on the roof or consists of a cindered half-acre, don't bother to read this. But perhaps you have grass, trees, shrubs, flower beds or woodland echoes; perhaps you have an acreage you call campus. To thee we sing.

We sing of a close-cutting, non-skipping, corner-reaching, rough-riding, hill-climbing mower made by the Gravely Motor Plow and Cultivator Co., Dunbar, W. Va. A slogan of this mower manufacturer is "If the Gravely won't cut it, you will have to use an axe."

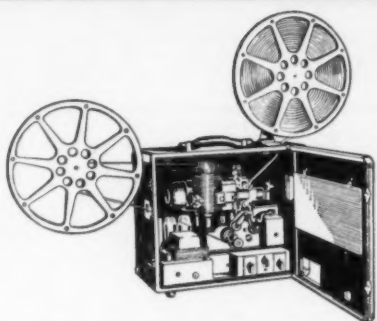
That gives the impression that this mower, with its sickle unit and its rotary unit, while not the equal of an axe, is possibly as strong as an ox. It's powerful, all right, and like the ox it is gentle. Its cutting unit is out in front where the grounds keeper can see it. Thus he can mow safely within an inch or two of shrubbery, flower beds, fences and curbs. He can't get quite that close to a woodland echo.

New Day in Business

Have some of the boys you meet at Rotary Club been talking about the remarkable sales policy of Royal Metal Manufacturing Company, Chicago? Your old friend in the school equipment field has the advertising and manufacturing world agog with its new restriction on production and sales. Maybe you have been following some of the ads in *Time*, where this company describes its policy of setting a definite upper limit of \$1,500,000 on its annual sales volume and refusing to accept business above that figure.

"If dealers cannot supply Royal Furniture, buy from Royal's worthy competitors." Did you think you would live to see that day in business?

We know you read about Royal's chairs, desks and tables in *The Nation's Schools* ads. But follow the *Time* advertisements too, or look up the article "Panics Can't Hurt This Firm" in *Printer's Ink* for February 13. Here is a company whose products you have long admired that is attempting to smooth out its own business cycle, believing that economic stability should be the first aim of business.



Steady Screen Pictures

An essential in which

Bell & Howell **FILMO** Projectors
ARE SUPREME!

Perfect steadiness of the motion picture on the screen is necessary to safeguard the eyesight of pupils. There must be no trace of jumpiness, either vertically or laterally. A scientific test which can be made in your school proves the supremacy of Bell & Howell Filmo 16 mm. Projectors in this vital requirement.

"Metered Lubrication," another exclusive Bell & Howell advantage, assures the continuance of Filmo's original superior performance.

Write today for full information about these and the many other sound reasons why your school projectors should be Filmos. Prices, \$125 and up. Models for every school need—for both sound and silent film.

BELL & HOWELL COMPANY

1855 Larchmont Ave., Chicago
NEW YORK • HOLLYWOOD • LONDON

Stage ● Equipment

Velour Curtains * Draperies *
Scenery and Rigging * Equip-
ment of the Highest Quality
* Service and Installation by
Experienced Personnel * Write

TWIN CITY SCENIC COMPANY

1126 CHIMES BUILDING, SYRACUSE, N. Y.
2819 NICOLLET AVENUE, MINNEAPOLIS, MINN.
602 MARQUETTE BLDG., DETROIT, MICHIGAN
4704 PERSHING AVENUE, FT. WORTH, TEXAS



Nearly a half billion square feet of Old Reliable Hyloplate Blackboard is now giving satisfactory performance the world over.



Old Reliable Hyloplate has been the standard of high quality in blackboards for so long, that the name "Hyloplate" often is the general term applied to all composition blackboards. There is only **ONE OLD RELIABLE HYLOPLATE**... insist upon the **GENUINE**.

HYLOPLATE has a velvety writing surface that never wears slick or reflects light to cause eyestrain. It takes crayon with crispness, and registers a clear, uniform mark that is easily read and erased.

In the interests of economy and satisfaction in performance, insist upon **OLD RELIABLE HYLOPLATE FOR YOUR REPLACEMENTS**.

Sample and prices gladly sent
on request. Address Dept. H-321



National Conference on Visual Education and Film Exhibition

DeVry Foundation

(Formerly DeVry Summer School of Visual Education)

SIXTH SESSION

CHICAGO—JUNE 22 TO 25, 1936

At the Francis W. Park School, 330 Webster Ave.
(Opposite Lincoln Park)

THE WEEK BEFORE THE N. E. A. AT PORTLAND

Use Reduced Railway Fares and Stop-over Privilege.

Four days of film exhibitions and discussions by leading educators, sales executives and advertising men, viewing and discussing the latest and best industrial and educational films—sound and silent.

Film producers are invited to submit their film entry for exhibition and study. The list accepted will be announced in advance of the Conference Session.

MEMBERSHIP IS FREE—ADMISSION BY REGISTRATION CARDS

Those who have a reasonable expectation of attending are invited to sign advance Registration Card below and mail to address printed on card. This card will insure membership and admission to all sessions, and will bring you detailed program as soon as printed. No obligation involved.

ADVANCE REGISTRATION CARD

National Conference on Visual Education, and Film Exhibition
1111 Center Street Chicago, Illinois

Name.....

Address.....

Position.....

Film Entry—if any.....

◀ CLIP THIS AD FOR REFERENCE. IT WILL NOT BE REPEATED. ▶

PAGE FENCE

New LINE POST
MAKES FENCE HISTORY



*"Page knows
fencing and metals"*

"We recognize PAGE as the fence pioneer. Witness this new fence post. Heretofore, fence posts have been adaptations of existing sections. Now PAGE gives us the new wing channel line Post designed by their engineers especially for fence and fence alone, with many advantages resulting—superior galvanizing, greater strength, a far neater, more serviceable installation."

PAGE knows *fencing and metal*. Since no one metal is suitable for all fence conditions, PAGE alone offers a selection of *quality fence metals*—PAGE-ARMCO Ingot Iron, PAGE "ALCOA" Aluminum, PAGE Allegheny Stainless Steel, PAGE Copper-Bearing Steel, PAGE genuine Wrought Iron.

Located throughout the United States are 92 Page Fence Distributors who will gladly consult with you, without obligation, in best solving your fencing problem. They are prepared to recommend impartially the particular metal that will give you the best service and to assume full responsibility for proper installation.

Write to any one of the offices shown below for helpful literature and name of the Page Fence expert nearest you.



**PAGE FENCE ASSOCIATION
BRIDGEPORT, CONNECTICUT**

New York Pittsburgh Atlanta Chicago San Francisco

This Label . . . Your Guarantee

The PAGE P-12 label identifies PAGE galvanizing which is guaranteed to withstand a minimum of 12 one-minute dips by the Preece Test. PAGE P-12 galvanizing applies not only to fence fabric but also to posts, top rail and fittings as well—*your guarantee of maximum resistance to rust.*

AMERICA'S FIRST WIRE FENCE . . . SINCE 1883

THE BOOKSHELF . . .

ADOLESCENCE. A STUDY IN THE TEEN YEARS. By Lawrence Augustus Averill. Boston: Houghton Mifflin Co., 1936. Pp. vi+496. \$2.25.

Case method of approach to the psychology of adolescence, supplementing the experimental and statistical presentation in other contributions. Of special interest to secondary school teachers.

EDUCATION IN THE KINDERGARTEN. By Josephine C. Foster and Neith E. Headley. New York: American Book Company, 1936. Pp. xii+368. \$2.

Practical, common-sense treatment of the kindergarten period in education. This book should be of interest and value not only to the kindergarten teacher but also to the elementary principal.

PREPARATION FOR SCHOOL LIBRARY WORK. By Lucile F. Fargo. New York: Columbia University Press, 1936. Pp. vii+190. \$3.

A librarian presents a program of instruction for the professional teacher—librarians, school librarians and teachers.

THE PSYCHOLOGY OF THE AUDIENCE. By H. L. Hollingworth. New York: American Book Company, 1935. Pp. x+232. \$2.50.

To those executives who are worried about the effects of their speeches, this popularized gathering together of what is now known of audience-speaker relationships should be unusually welcome. An excellent text for improving public appearance and effectiveness.

BUDGETING IN PUBLIC SCHOOLS. By Chris A. De Young. Garden City: Doubleday, Doran & Co., Inc., 1936. Pp. xiv+610. \$3.50.

An excellent treatment of the school budget in its many aspects. Results of field experimentation developed since the subject was first presented in detail a decade ago added to the basic theory make this book a good summation to date and a valuable aid to the school executive.

THE SECURITY OF PUBLIC DEPOSITS. By Martin L. Faust. Public Administration Service No. 51. Chicago: Public Administration Service, 1936. Pp. 45. \$0.50. (Paper cover.)

Brief but comprehensive report of conditions, practices and possibilities for the better safeguarding of public moneys.

GUIDANCE WORKING MATERIALS FOR JUNIOR AND SENIOR HIGH SCHOOLS. By Frank Jones Clark. Seattle, Wash.: Published by the Author (at Roosevelt High School), 1935. Pp. ix+117. \$1 plus postage. (Mimeographed.)

Interesting outline material for teachers' use in guidance activities.

PRINCIPLES AND TECHNIQUES OF CURRICULUM MAKING. By Edgar Marion Draper. New York: D. Appleton-Century Co., 1936. Pp. xv+875. \$3.25.

Designed as a double barreled book: serviceable both to teaching in advanced classes and to administrators in the field who are confronted by this delicate problem. Complete and practical treatment.

AN EVALUATION OF THE COURSES IN EDUCATION OF A STATE TEACHERS COLLEGE BY TEACHERS IN SERVICE. By Roscoe George Linder. Teachers College, Columbia University, Contributions to Education No. 664. New York: Bureau of Publications, Teachers College, Columbia University, 1935. Pp. viii+156. \$1.85.

Valuable start in a much needed field; objective study of the value of professional courses in education for teachers in training. Should serve as stimulus to further effort.



Modern-Life Speller

BY FRED C. AYER, E. E. OBERHOLTZER, AND CLIFFORD WOODY

This is a new series of spellers offering lessons built around special centers of child interest. It effectively employs a study-test-study method, with emphasis on study and attentive drill. The vocabulary, scientifically selected and graded, is grouped into three levels of usefulness. The unit arrangement, specific provision for creative units, and three-level grouping of words provide for flexibility of procedure and adaptation to individual differences.

Send for Information

WORLD BOOK COMPANY

Yonkers-on-Hudson, New York

2126 Prairie Avenue, Chicago

Our Business Life

By
Lloyd L. Jones

A junior business text that recognizes the part played by the individual in business or in economic community life. It deals with the effective and efficient use of the common business services. The foundation which it builds for business-like living also serves as a foundation for further study of business subjects and for work in the business world. Filled with worth-while student activity, it generates enthusiasm for the course on the part of both the teacher and the student. Can be used with or without the correlated work book. Beautifully printed, profusely illustrated, and unusually readable.

Ready April 15

*Place your order now with our nearest office
for an examination copy.*

THE GREGG PUBLISHING CO.

New York Chicago San Francisco Boston
Toronto London Sydney

A GREGG BOOK IS A GOOD BOOK

THE 1936 EDITION OF THE BARROWS-PARKER GEOGRAPHIES

JOURNEYS IN DISTANT LANDS
UNITED STATES AND CANADA

The major purpose of this series of texts is to help pupils understand (1) specific problems that various peoples face in using their natural environments and in coping with difficulties that those environments present, and (2) ways in which people are solving or attempting to solve those problems.

JOURNEYS IN DISTANT LANDS and UNITED STATES AND CANADA have been entirely reset, the most recent data available are included, and the books have new maps and hundreds of new illustrations.

Silver Burdett Company

New York Newark Boston Chicago San Francisco

**AFTER ALL THE
FIGURES WERE IN**
We Selected
**THE MOST
MODERN FENCE**

★
CONTINENTAL Chain-Link FENCE



**CONTINENTAL
HAS
14 MODERN
AND
DISTINCTIVE
Features**

"We obtained figures on all kinds of fence—found Continental Chain-Link cost considerably less than we had supposed."

Heat-treated wire for high tensile strength and elasticity to absorb shocks and keep its shape—copper-bearing (0.20 percent minimum) special-analysis steel for rust resistance—heavy hot-dipped zinc coating, and many other features make Continental Chain-Link Fence maintain its attractive appearance and give superior service through extra years of fence life. Learn how little it will cost to have this modern protection for persons and property.

MAIL THIS COUPON...TODAY

★ TR. MRK. REG. U. S. PAT. OFF.

CONTINENTAL STEEL CORP., Kokomo, Indiana:

Tell us, without obligation, about the modern features that put consistent value into your Chain-Link fence.

Name.....

Address.....

THE NEXT HUNDRED YEARS. THE UNFINISHED BUSINESS OF SCIENCE. By C. C. Furnas. (*A Williams and Wilkins book*). New York: Reynal & Hitchcock, Inc., 1936. Pp. xiv+434. \$3.

This book grew out of a heavy disappointment in the so-called Century of Progress exhibition at Chicago. A survey of the findings and future possibilities of science are related fascinatingly by a noted chemical engineer. In turn he treats biology, chemistry, physics and their applications in engineering. Most of it is very good! In a final section he considers certain possible social effects of current and possible discoveries. Altogether one of the most interesting and rationally optimistic books encountered in a long time. It has an appeal both to the teacher and to the secondary school pupil. Place in your library by all means.

HIGHLIGHTS OF ASTRONOMY. By Walter Bartky. Chicago: The University of Chicago Press, 1935. Illustrated. Pp. xiii+280. \$2.50. (*Stellarscope and films, \$2*).

Another contribution to the "New Plan" texts at the University of Chicago. This time the field is astronomy, but the style and method are that of the revolutionary "From Galileo to Cosmic Rays." It is a general text designed specifically for the upper years of high school or junior college.

MUNICIPAL FINANCE LEGISLATION, 1935: A DIGEST. Compiled by Irving Tenner. Publication No. 50. Chicago: Public Administration Service, 1935. Pp. ix+44. \$0.60. (*Paper cover.*)

Bird's-eye view of enactments dealing with problems of municipal finance of the forty-seven state legislatures which met in 1935. Gives a general picture of legislative trends, and then presents paragraph-digests of laws. The devices that the legislators are using to improve the fiscal machinery of local government are herein reviewed.

THE INFLUENCE OF WOMEN AND ITS CURE. By John Erskine. Indianapolis: The Bobbs-Merrill Company, 1936. First Edition. Pp. 151. \$1.50.

Let the women read wisely and ponder well! There's much shrewd wisdom in this little book but unfortunately we feel it is almost a generation late! The hands of the clock cannot be turned back but a brave man's frank comments on the weaknesses of the current feminine position are worthy of reading. They apply particularly to the teaching profession where his suggestions for a larger number of virile men to teach our male adolescents will fall on ears already sensitized and fully awake to this necessity. Unfortunately economics will continue to play a sorry part. Men, we advise its reading.

SHIPS THAT HAVE MADE HISTORY. By Gregory Robinson. Illustrated by the Author. New York: Kennedy Brothers, Inc., 1936. Pp. vi+139. \$3.75.

Twelve historical ships and the men that sailed them by an author-artist who knows both the sea and ships. Authentic drawings and narrative of unimpeachable quality make this book with its beautiful paintings one to thrill adults as well as adolescents. Highly recommended for secondary libraries.

Just Off the Press

PRINCIPLES OF METHODS. By J. Herbert Blackhurst. Des Moines: University Press, 1936. Pp. 338. \$2.50.

UP IN THE ATTIC. By Cora R. Kelly. With illustrations by Dorothy B. Wells. Boston: Bruce Humphries, Inc., 1935. Pp. 28. \$0.80.

BEGINNING MECHANICAL DRAWING UNITS. For use in Junior and Senior High Schools and Vocational Schools. By William E. Roberts. Peoria, Ill.: The Manual Arts Press, 1936. Pp. 142. \$0.88. (*Paper cover.*)

THE THORNDIKE LIBRARY, SERIES II. Six volumes. Edited by Edward L. Thorndike. New York: D. Appleton-Century Co., 1936. \$0.88 each volume.

CONTENTS

For May, 1936

Side Glances—

SECTION I—EDUCATIONAL ADMINISTRATION

Looking Forward.....	13
THE EDITOR outlines a credit plan that would permit school service to be uninterrupted during periods of depression. He eulogizes Charles De Garmo and William J. Bogan, and he commends a summer repair program for the physical plant and the new magazine on school business affairs.	
Texas—On the Cultural Map.....	16
One of the grievances cited in the Texas Declaration of Independence was the lack of a school system. Since 1836 when independence was won, a great school system has been building, but it is in the last thirty years that Texas has made its great strides. L. A. WOODS, state superintendent of public instruction, tells the story.	
What Price Administration?.....	21
Economic pressure pushes many good teachers out of the classroom and into administrative posts, with results that are not always happy, according to A. H. HORRALL, assistant superintendent of public schools, San Jose, Calif.	
Financing Student Activities.....	22
The workings of a successful Student Activity Fund are outlined by WALTER L. BUMGARDNER and JOSEPH E. BARBER, superintendent of schools and principal of the high school, respectively, at East Aurora, N. Y.	
Will Social Changes Bring a Building Boom?.....	23
A. F. HINRICHS, chief economist, bureau of labor statistics, U. S. Department of Labor, shows how social trends are affecting occupational opportunities. All of this implies larger expenditures for school plants.	
New Life in an Old Curriculum.....	25
The individual teacher's part in curriculum revision is emphasized by FRANCIS J. FLYNN, principal of Owens Valley Union High School, Independence, Calif.	
A Good Word for the One-Room School.....	27
Some arguments against consolidation are voiced by the superintendent of schools at Monticello, Ky., R. F. PETERS.	
Building a Graduation Program.....	29
An outline of the action and tableaux in a successful high school commencement at Saginaw, Mich., by STANLEY SCHUBERT, dramatics instructor, Arthur Hill High School, Saginaw.	
Mathematics and the Consumer.....	30
Brief description of a new high school course in consumer mathematics at Ponca City Senior High School by ANNE L. COWAN, head of mathematics department of this Oklahoma school.	
Taking Tenure to Court.....	31
School boards are slow to see the social values involved in teacher-tenure laws. Some local subterfuges that have been reprimanded by the courts form the basis of this article by M. M. CHAMBERS, specialist in school law and staff member of the American Youth Commission.	
Trends in Textbook Placement.....	33
SUPTS. FRANK E. ALLEN of South Bend, Ind., HEROLD C. HUNT of Kalamazoo, Mich., and FRANK A. JENSEN of LaSalle, Ill., make up a committee that has been studying effective methods of placing textbooks in the hands of pupils.	

A DEMAND BID

for contract bridge has been met in several high schools. Horseshoe pitching, on the other hand, has rarely been accorded curricular mention.

John Hay High School, Cleveland, has evening classes in horseshoe pitching, as well as contract, golf, badminton and other games. For this high school sets out to serve its community and to justify to all the townspeople its expensive building and expensive equipment.

In the daytime the school serves some 3,500 pupils, along with their teachers and organized groups of parents. In the evening it becomes the Cleveland Extension High School, a regular state chartered institution which 1,500 adults attend. Another 500 come in the evening for instruction and practice in sports and games. On Saturday morning 500 pupils or thereabouts get private and group instruction in music, largely from members of the Cleveland Symphony Orchestra.

William L. Moore, the principal, will tell the story of this community service in the leading article for June.

"UNFORTUNATELY, I Like to Teach School."

An article thus titled will be hard to pass by when you get your June issue. You won't need to read far until you see why it is published anonymously. A man doesn't hurl broadsides at the school board that pays him without shielding his identity.

This lament of a California school teacher concerns the all too common practice of a school board that assumes the administrator's prerogatives. It pictures, too, a local Mussolini, ruling not only the board of which he is a member and the paid administrator, but dictating from the public platforms of school communities over a wide area.

Published monthly by The NATION'S SCHOOLS PUBLISHING Co., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

CONTENTS

"AN unvarnished accounting on shiny paper"—that phrase is used to describe the published budget of the board of education, Rochester, N. Y. The children carry copies of it home, where it helps to reduce the number of myths about school expenditure by making it possible for those who really care about authentic information to put their hands on it. The staff finds that the mere publication of the budget, quite aside from technical and internal control, has served to check expenditures. Supt. James M. Spinning and Harold E. Akerly, assistant superintendent, will share their experiences in this form of school interpretation with readers of the June number.

WHAT twenty-five representative junior highs in the North Central territory are doing in the way of curricular changes and what they are finding the most troublesome problems in respect to the program of studies are told by means of verbatim statements in an article prepared for the June issue by Calvin O. Davis, professor of secondary education, University of Michigan. Doctor Davis summarizes the replies he received in ten statements that will command the attention of school administrators.

LUNCH in a country school is not likely to be dietetically sound unless someone steps in and plans it. In Massachusetts the state department of public health makes the rural school lunch one of its concerns. Mary Spalding, consultant in nutrition for the state department, writes for the coming issue of the problems encountered and gives a week's menus with quantity recipes.

WHAT are the qualifications of a good custodian? H. H. Linn, assistant superintendent in charge of business at Muskegon, Mich., lists the requirements made in that school system in a practical article for the next number.

- Turtle Mountain Schools..... 35
The long vacation comes in winter for the Indian and Norwegian children who live near the International Peace Garden. Before she married a faculty man at the State Teachers College, Dickinson, N. D., ESTHER ABBETMEYER SELKE, author of this brief feature, was herself a member of the college staff.
- Wrapping Red Tape in Cellophane..... 37
A time-saving device for the teacher is described by MAHLON R. WEBB, instructor in general science, Collinwood High School, Cleveland.
- One High School's Set-Up for Improving Instruction..... 39
I. H. LINDER, vice principal in charge of instruction, Senior High School, Sacramento, Calif., discusses a major problem.
- Adult Education in an Iowa County..... 41
As told by LLEWELLYN F. JONES, county supervisor of adult education, Orange City, Iowa.
- Happy to Say..... 42
Reminiscences and random suggestions by WILLIAM McANDREW.

SECTION II—THE SCHOOL PLANT

- Gardena High School, Gardena, Calif..... 43
FARRELL AND MILLER, architects of Vernon, Calif., designed this building. It has recently been made earthquakeproof with PWA funds.
- A School Dedicated to Modern Pioneering..... 44
In Hammondsport, N. Y., stands a new school that seems to possess all that is progressive in structural, mechanical and educational principles. PAUL W. SEAGERS, the principal, and ROBERT R. GRAHAM, architect of Middletown, N. Y., collaborate in a description of the Glenn H. Curtiss Memorial High School.
- Landscaping Frames the Picture..... 50
A. CARL STELLING of Briggs and Stelling, landscape architects, New York City, sketches the development of the grounds at the new Hammondsport high school.
- The Passing of the Skilled Mechanic..... 53
A Southern architect, W. W. SIMMONS of the school building division, state department of education, Atlanta, Ga., writes on a subject on which he feels keenly.
- Noise Fades From Modern Classroom..... 55
What a picture of peace is painted by IRWIN T. CATHARINE, superintendent of buildings, Philadelphia public schools, in his description of buildings that have been acoustically treated!
- Through Walls of Glass..... 57
An interesting application of glass brick to modern school construction as revealed in the Park School, Hibbing, Minn.
- Modern Dress for the School Lunch Tray..... 58
MAUD E. STITT, director of public school cafeterias, Tulsa, Okla., gives purchasing points on silverware, chinaware and trays.
- Routing the Rat..... 64
Not a trace remains of this rodent after JOSEPH N. LAFERRIERE's instructions are carried out. This is the second of two articles on ridding school buildings of rats.
- The Effective Use of Motion Pictures..... 68
The uses to which photoplays are put in the Pittsburgh school system are enumerated by J. A. HOLLINGER, director of the department of science.

- | | | | |
|-----------------------------|----|---------------------------|----|
| Better Plant Practices..... | 52 | Regional News..... | 80 |
| News in Review..... | 70 | Names in the News..... | 84 |
| Coming Meetings..... | 74 | Notes for Buyers..... | 86 |
| Private Schools..... | 74 | The Bookshelf..... | 88 |
| Visual Education..... | 76 | Index of Advertisers..... | 9 |
| Radio News and Programs... | 78 | Placement Service..... | 92 |

LOOKING FORWARD

Credit—A Stabilizer

THE educational function within any culture is a continuing one. Regardless of war, economic depression or natural catastrophe, it must continue to operate without cessation. This condition arises from the fundamental function of the activity and from the fact that the biologic processes of reproduction are not stopped by unusual occurrences within the social structure. There is also present the ever constant need for the reteaching of the adult.

While this generalization is true of all cultures in which technologic processes play a large part, it is doubly true of democracy in which the need is not only to be informed but to be able to use that information intelligently in the determination of social policy. Cessation, curtailment or neglect of the educational function will produce ultimately serious impairment of the democratic process.

During the current depression public education was seriously curtailed. While the existing predepression program both in extent and quality was quite inadequate for modern social needs, yet the entire activity suffered heavily. The reasons were many. Undoubtedly some of the curtailment was due to the activities of unfriendly interest-groups and more was due to the immediate effects of the depression. Much more, however, can be credited to obsolete organization, a cumbersome and antiquated system of taxation and to traditional methods of internal financing.

As the schools are now emerging from the depression and tending to approach predepression budgets in certain areas, much discussion arises as to whether it is possible to avoid future debacles during low periods of economic productivity by more intelligent planning. Future school revenue systems must provide for certainty, adequacy and flexibility.

Certain obvious requirements are necessary. So long as the archaic system of district organization is maintained, it will be difficult to provide for adequacy and certainty of revenue. While there is no magic in mere size, a natural area with sufficient wealth to provide without strain for at least half the required program seems to be an essential. The second general requirement is the development of a well balanced system of

taxation in which all forms of wealth will be forced to contribute their relative share and which will be efficient both in the levy and in administration. Such changes already appear in the process of making. Administrative reorganization and a well balanced revenue system will provide for adequacy and flexibility in tax revenue for public education.

It is quite apparent that practically so long as the system of private enterprise continues there will be depressions. These low periods may be progressively cushioned to some extent by a variety of techniques. They will still be felt.

Since the returns from all systems of public revenue are directly contingent upon economic productivity, or the total social income, it is immediately obvious that the locality, state or nation cannot expect to raise as much revenue during low as during high periods. Thus the element of uncertainty is injected into all programs for school revenue unless some device can be found.

In common with public education, many other forms of social and political activity must be carried on during these low periods. At a time when the morale of the people is lowest, the need for adequate recreation, libraries, art institutes and general adult education is highest. Health and sanitation cannot be neglected. Law and order must be maintained. Governmental activity also has a secondary depression rôle which must not be underestimated in the future. The maintenance of current governmental expenditure as a stabilizing and recovery device is only tardily being recognized.

Despite the natural decrease in income during depressions, it is possible through intelligent planning and administration to provide the third essential—certainty. It means a complete reversal of the traditional policy of using credit extensively for capital improvement and allocating credit to emergency uses only for current expense. The means of equalizing school revenue may be accomplished through a much more rational use of credit than at present. Instead of permitting small school districts to borrow money to finance buildings, the use of all credit should be legally denied to the local district by the state. The state, as the constitutional unit in education, should include in its program for direct support to local school districts sufficient funds from current revenue to provide for essen-

tial capital improvement and extension. This will mean an additional appropriation of 15 to 25 per cent more total revenue, depending upon the conditions within a state and the stage of development in its school organization. Revenue for this purpose may be secured from state or from federal sources. If from federal sources, such a procedure would dovetail nicely into the federal building programs. It will also be desirable to synchronize the tax and academic years to eliminate the need for short time borrowings on tax warrants, a practice that is sometimes flagrantly abused.

Freed from the incubus of heavy funded debt, the local district could devote its entire income to the more efficient administration of its current program. Since finance for new building would be determined by actual need and in accord with good educational designing, there would be fewer poorly placed and poorly built structures. Complete elimination of monuments to proud school board members should be possible.

As an example of the plan in operation, let us suppose that in a certain state local districts have been reorganized on bases of financial and population adequacy, an existing funded debt of \$200,000,000 for buildings is being systematically retired at an annual outlay of approximately \$20,000,000 for principal and interest, and of the annual outlay of \$100,000,000 for current expense during normal years, 40 per cent is furnished by the state and 60 per cent by the local districts. In addition, the state is appropriating \$15,000,000 annually for plant enlargement and improvement.

There is the onset of depression and the cushioning and stabilizing function of the plan becomes apparent. During the first year of the depression revenues are not affected but in the second year they fall off 10 per cent. The state borrows ten million dollars to maintain the hundred millions for current expense intact. During the third, fourth and fifth years revenue is reduced 20 per cent and the state borrows twenty millions each year during this period. The total debt incurred for current expense is \$70,000,000 at the close of the depression.

This \$70,000,000 borrowed on short term notes, against delinquent taxes in part, and at extremely favorable interest rates securable during a depression period, would represent the debt obligation. This floating debt should be paid within a five-year period so the annual cost on a short term, low interest basis will be approximately \$15,000,000. In relation to previous burdens for funded debt this load would be a light one. A fair constancy in current expense has been assumed in this instance because the next depression will find the total school population relatively stable. However, when growth does occur provision could be made within the state through simple adjustments.

During the depression period, thanks to the cushioning effect of credit, school service would be uninterrupted and the children would enjoy their normal rights.

Quality in buildings, equipment and supplies would have been maintained. The purchasing power of educational personnel would not have been diminished, the importance of which in the community during a period of curtailed buying can scarcely be overemphasized. Since approximately eighty cents out of every current school dollar would be devoted to salaries and since these are spent within thirty days, every economic activity in the district would have a backlog of certainty. If the practice were applied to other branches of government, recovery could be accomplished much more quickly.

Full benefits of such a program cannot become completely effective until local districts have paid present funded debts. But future school budgets can be stabilized with certainty, if the proper use of credit as the major instrument in stabilization is considered. A radical departure from conventional assumptions concerning the use of credit is implied and is imperative.

Charles De Garmo

CHARLES DE GARMO (1849-1934), who organized the department of education at Cornell University in 1898, was an unusual man to whom public education in the United States owes a serious debt. When the educational history of the "nineties" and of the first two decades of the twentieth century is finally written, he will remain as one of the outstanding contributors of that period. He grew up during the formative period in United States education, long before we had produced either philosophy or methodology to meet our peculiar needs. Our public and private education during the "sixties" and again during the "eighties" and "nineties" was influenced chiefly by two outstanding European educationists. The greatest personality was Pestalozzi whose methodology became the foundation of our early teacher training institutions. Next to him ranked Herbart whose system of formalized teaching had a wide influence on the training and practice of teachers in the United States.

Among the first to journey to Jena in the "eighties" to study under the master Herbart was Charles De Garmo. Completely captivated both by the man and his method, he returned to the United States where he became the first zealous apostle of Herbartian teaching. He founded and was first president of the Herbartian society which still exists under the more generalized name, the National Society for the Study of Education. Its yearbooks have been landmarks in the history of educational thought and practice. Thousands of teachers in training have used and are still using them as textbooks. Doctor De Garmo was the first editor of this series, and to his continuing enthusiasm the national society owes the impetus that has kept it on so high a plane of achievement for more than a generation.

Not only did Doctor De Garmo exercise great influence through his classroom teaching, which was always

stimulating, but as a prolific lecturer and writer his name and work spread from coast to coast. Cornell was his home and his institution but his influence expanded quickly until he became a figure of national prominence. Even after his retirement in 1914 he maintained his eager interest. Every spring he returned from his Florida home to the Ithaca campus where he spent summer and fall joyously with colleagues and with those mature students who sought his counsel. He was still joining educational organizations as late as his eighty-third year.

Cornell University has now undertaken to raise a memorial to the memory of this great educationist. While he belongs to the country as a whole, it is most fitting that this memorial, contributed by all sections and areas, should be located at Cornell, his home and workshop for more than a generation. It is also fitting that the memorial take the form of a continuing contribution to the advance of education rather than be expressed as an inanimate monument. It is what Charles De Garmo would have approved. This memorial movement is recommended wholeheartedly to the teaching profession as something of real worth and lasting value.

William A. Bogan

A KINDLY soul, with good understanding of the operation of social forces, with a deep sympathy for the weak and unfortunate, and a keen friend was William A. Bogan, whose recent and untimely death, while superintendent of Chicago schools, creates a real void in the ranks of school administration. Loyalty to his ideals and to those of his friends who, in his opinion, followed them was a significant characteristic.

William A. Bogan worked in and lived with a large city school system for the greater part of his professional life. Chicago's schools have not been noted for their freedom from political control and the path to advancement is usually beset with the necessity for obeying those political forces which happen to dominate. He lived through several mayoralties that were scarcely fastidious in their methods of control. As high school principal, as assistant superintendent and later as superintendent, William A. Bogan managed to keep himself unusually free from these entangling alliances and never swerved from his professional principles although at times such decisions were costly.

His stand during the depression was particularly noteworthy. He fought splendidly against the reactionary and selfish interests that attempted and almost succeeded in crippling permanently the Chicago public schools. Regardless of personal sacrifice, he fought with a vigor, a definiteness of purpose and an expenditure of physical energy that would have taxed a younger and stronger man. He didn't always win, but that appeared to matter little. He never quit.

In his personal relations Mr. Bogan was always kindly. He never seemed to lose the sincere and gentle interest in the welfare of individuals, children, teachers and friends. The unusual expenditures of energy during the depression sapped his strength, weakened his heart and contributed directly to his death. He will always be remembered for his sturdy stand for public education during the dark days of 1932 and 1933. He was not successful in removing the Chicago schools from the political control of the city hall—no single individual could accomplish that—but he did create a public opinion that may some day achieve this essential condition.

Planning Time

SINCE time immemorial May has been accepted as housecleaning time. In school administration this is the month when the next budget has either been approved or is in the process of making for early approval. School will close within a short time and the problems of the summer vacation must be considered.

With funds available during the summer months every effort should be made to take careful inventory and to place the physical plant in good working order for the fall semester. Clean-up and paint-up programs may be further supplemented by essential repairs to both the physical and mechanical plant. Now is the time to examine most carefully the entire heating system and to make such minor improvements or replacements as may be required to prevent major breakdowns next winter. Small imperfections in roofs cared for during the dry summer months may save hundreds of dollars when the rigors of the next winter make themselves felt. Replacement of hardware, repairs of weak locks and hinges are all small but essential things. Summer time should be repair time, and May is the month when plans are made and buying schedules determined.

School Business Affairs

ANOTHER specialized publication in the field of public education has made its appearance. Now in its third issue, *School Business Affairs*, the house organ of the National Association of Public School Business Officials, represents a somewhat new type of educational publication. Devoted primarily to news of the organization and to short articles of a practical nature concerning finance, service of supplies, plant operation and upkeep, it will serve as a means of effecting a closer relationship between members and regions. It also marks the development of this organization in new fields of policy and with a much improved general program of procedure and education. The national officials are to be congratulated upon their effort.

The Editor

Texas—On the Cultural Map



By L. A. WOODS

DESIRE for education was one of the forces that brought about revolution and creation of the republic of Texas in 1836.

Although they were irked by a tyrant's tax collectors who were growing increasingly greedy, and angered because their religious liberties were restricted, it may be truthfully said of the Texas pioneers that they cocked their guns and unsheathed their swords to fight for independence because they wanted schools. One of the causes or grievances recited in the Texas Declaration of Independence was the lack of a school system.

Texas won independence in 1836, and for nine years was a republic, joining the Union in 1845. During 1936 it will celebrate 100 years of

This forest of oil derricks in East Texas—19,000 wells in all—furnishes by far the greatest portion of the state's income for schools. The University of Texas, one building of which is shown above, has a permanent fund of \$29,000,000 from its lands alone.





By the end of 1936 Fort Worth will have landscaped the grounds of every one of its sixty-four schools.

political freedom with the Texas Centennial Exposition in Dallas, to open on June 6 and run through November 29. The millions of dollars worth of beautiful buildings and exhibits will furnish evidence of the state's economic greatness, and the historical theme will be carried out in detail. But the exposition also will reflect the cultural life of the state, and the participation of Texas youth will be evidence of its great public school system.

Ten thousand Texas school pupils will sing in a massed chorus as one of the feature attractions. Future Farmers of America and 4-H Club boys and girls will have shows of their own in the exhibit halls. Visitors will learn that Texas, once considered low in literacy tables, has bulwarked its social and economic life with a public

school system and institutions of higher learning second to none.

The white colonizers demanded a provision in the constitution of 1821, when Texas was still a Mexican province, for a public school system, and the Mexican government consented. But it was a meaningless promise. Years passed, and Texas children were growing up on the frontier without even elemental education.

When independence was asserted and the constitution of the republic of Texas was written in 1836, the people issued another mandate for an educational system, and they got it. Little progress was made during the administration of Sam Houston, first president of the republic, but when Mirabeau B. Lamar succeeded him, he took steps immediately to set up a school system.

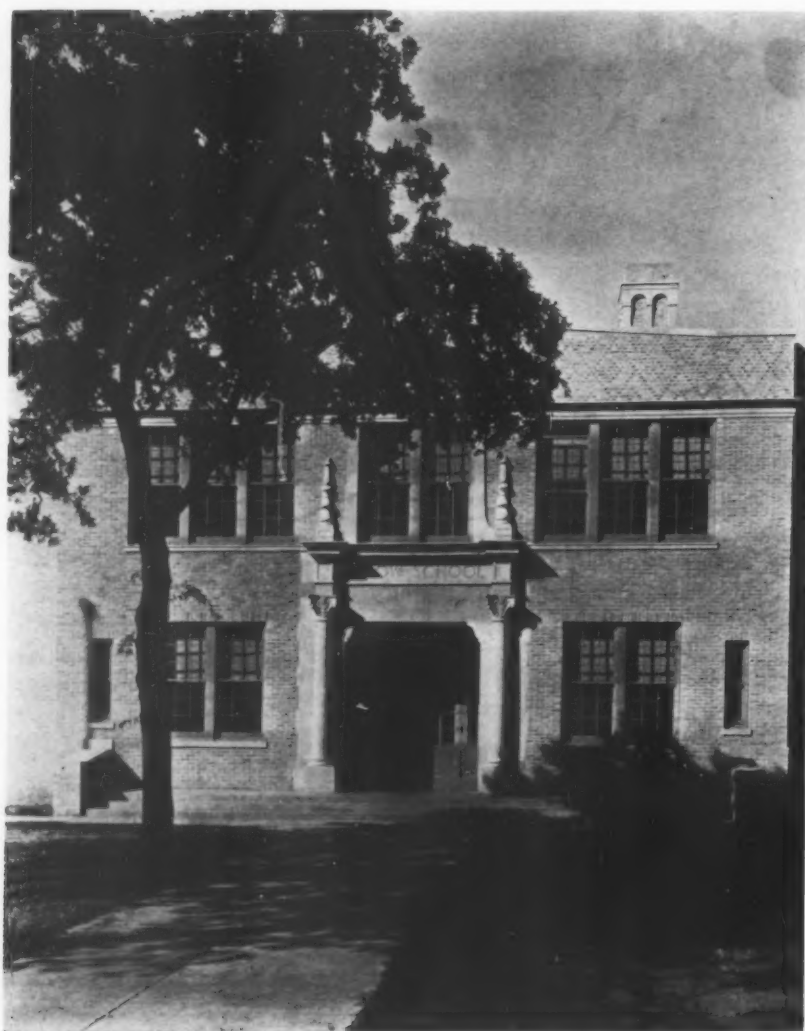
In 1839, the congress of the republic of Texas apportioned three leagues of land for each county for the creation of schools. Another league was added later. Fifty leagues were assigned for the University of Texas.

Texas' public domain enabled it to build schools and to attract railroads, which were given large amounts of land to induce them to build lines to serve the new empire. Practically every school in Texas, from the single-room frame structures in remote rural areas to the finest city plants, has a picture or a statue of President Lamar, considered as the "father of education in Texas."

While President Lamar worked diligently for the upbuilding of the school system, time was required. The real foundation for the present system was laid by Governor E. M.



On a thirty-acre site stands Thomas Jefferson High School, San Antonio, accommodating 2,000 pupils.



The \$325,000 federal building at the Centennial Exposition.

Considered a typical Texas grammar school is this building located in a suburb of Dallas. In the last thirty years, state school revenue has increased by 200 per cent.

Pease in 1854, when he succeeded in having \$2,000,000 of \$10,000,000 realized from the sale of public lands ear-marked for the establishment of schools. From that time forward, development of Texas' educational facilities was rapid.

In 300 years, Texas had made little progress toward an educational system. Children of the Latin pioneers sat at the feet of Spanish padres in small schools privately conducted in the sixteenth century. With the coming of Anglo-American civilization, development of the state both economically and culturally was begun in earnest.

Many Schools of Higher Education

During the days of the Texas republic, churches and individuals were operating about fifty colleges and academies. The Baptist Church established Baylor University at Waco, today the oldest Texas institution of higher learning. The Methodist Church founded Rutersville University at Rutersville, later abandoned when Soule University was built at Chappel Hill. Subsequently, the church organized Southwestern University at Georgetown and Southern Methodist University in Dallas. The Methodists also abandoned old McKenzie College at Clarksville when Southwestern and Southern Methodist were founded.

Another of the oldest universities in Texas is Austin College at Sherman, founded by the Presbyterian Church. Add-Ran College of Fort Worth became Texas Christian University when taken over by the Disciples of Christ. The leading Catholic university in Texas is St. Edwards in Austin. Rice Institute, founded and endowed by William M. Rice, is the largest privately endowed university in Texas.

Texas began organization of a higher educational system in 1876 with the establishment of the Agricultural and Mechanical College of Texas. Seven years later, the University of Texas was opened. Today, the state supports sixteen institutions for higher education.

The University of Texas in Austin is one of the major universities in the nation. It also has a medical branch in Galveston, and the College of Mines and Metallurgy at El Paso. The A. & M. College has a branch in Arlington, known as the North Texas Agricultural College. The state also supports John Tarleton Agricultural College at Stephenville.

Texas Technological College, located in Lubbock, is the largest school in West Texas. The state maintains the College of Industrial Arts for Women at Denton, the Texas College of Arts and Industries at Kingsville, and the Prairie View State Industrial College at Prairie View, the last a school of higher education for Negroes.

Texas school teachers get training for their professions in seven teachers' colleges maintained by the state. They are located in Alpine, Canyon, Commerce, Denton, Huntsville, Nacogdoches and San Marcos. In addition, schools for the deaf and the blind are maintained in Austin.

Sources of Revenue

Two of the biggest sources of revenue today are the cigarette tax, which is three cents on each package, and the gasoline tax, of which the school fund gets one cent per gallon. Thirty years ago, the per capita apportionment was \$5.25 per pupil. Few rural or small town schools could afford to have a nine months' free school with such small revenue, as a result of which a tuition charge was made during part of the term. Hence, many children from poor families could not attend. Texas' population was increasing steadily, and there was a growing demand for more school facilities. The apportionment had increased gradually until it reached \$8.50 in 1920, still far below the amount needed to employ the the best of teachers and provide full terms.

Between 1920 and 1930, Texas had its greatest growth in population. It increased 1,161,148. School expansion during those years was absolutely necessary. There was a

great influx of new Texas citizens from the north and east during 1920. Accordingly, in 1921, the per capita apportionment was raised from \$8.50 to \$14.50, by far the greatest single increase ever authorized at one time.

New taxes from gasoline and cigarettes enabled further increases, and by 1933, the apportionment was \$16 per capita, an increase of nearly 100 per cent in twelve years, and more than 200 per cent in thirty years.

Wealth From Oil Lands

A permanent school fund was provided for in the constitution of 1876, and much of the public domain, which Texas retained by agreement when entering the Union, eventually was assigned to the school fund. A huge fortune has been accumulated from the gradual disposition of the school lands to settlers. The system still owns two and one-quarter million acres of land outright, and retains royalty interest in another seven and one-half million acres. Much of the wealth accumulated came from oil discovered under the school lands. The permanent fund today owns bonds, notes and cash averaging \$70,000,000 to \$75,000,000. Interest on invested capital is used to supplement the general school fund.

The University of Texas was similarly fortunate in disposition of land once worth only a few cents per acre and still unfit for agricultural use. Oil was found under much of it, too, and the permanent fund of the university today is more than \$29,000,000, of which \$19,000,000 has been received in oil payments, and the other \$10,000,000 represents the estimated value of 2,000,000 acres belonging to the institution. Income from the fund is being used to erect new buildings on the campus, which was badly in need of improvements when the oil pools were discovered on university land a few years ago.

Texas took another step toward raising the educational standards of the school system in 1917, when it adopted the compulsory education law. It requires that children



McFarlin Memorial Auditorium, Southern Methodist University, Dallas, and (below) Seale Junior High School in Corpus Christi.



must attend school at least three months after the first day of January, and parents can be punished for not compelling such attendance. When the bill was introduced and was being argued, it was regarded with serious misgivings by many lawmakers. They feared it would be impossible to enforce it. Parents who had not been dutiful before, however, in sending their children to school, readily obeyed it.

Two years later, the free textbook law was passed. From the primary grades through high school, pupils are

provided with free books, making it possible for many of them to attend school who could not otherwise do so.

Elementary and high school education is not such a problem from many standpoints as it was twenty years ago in Texas. The state had few roads fit for travel then, but now has the most extensive highway system of any state. Pupils who once walked several miles to school in bitter weather now ride in school busses at nominal cost.

The educational system today consists of more than 8,800 free public

schools, of which 1,400 are high schools, between 300 and 400 private and parochial schools, and 130 universities, senior and junior colleges and academies. The school population is between 1,500,000 and 1,600,000. Approximately \$220,000,000 is invested in school buildings, sites and playgrounds, furniture, teachers' homes, science, home economics and manual training equipment, libraries and busses.

Texas has a variety of peoples which give it a many-sided school problem. But wherever there is sufficient demand for instruction in a foreign language in addition to English, it is provided. The Czechoslovakian children in South Texas are taught their native tongue as well as English. The German and Bohemian pupils of Central Texas have the same advantage. Spanish is taught in all of the larger schools in Texas.

In the larger cities, Mexicans are segregated into schools of their own, because it has been learned that classroom instruction can thus be made more efficient. All of the larger cities with large Negro populations have facilities for instruction of Negro children.

Extensive improvement to school plants has been made possible in the last two years through the grants of government funds for enlargement of grounds and construction and improvement of buildings. The public school system is in by far the healthiest condition it has known since its inception.

School teachers' salaries in Texas have doubled in the last twenty-five years. The qualifications of instructors have shown a similar improvement.

Texas has made enormous strides in providing every facility for educating its youth, a movement begun back in 1836. The state's greatly improved position on the cultural map of the world is largely attributable to the fact that school teaching has become stabilized as a profession, and stronger financial support of the public school system has enabled pupils to enjoy full terms.

What Price Administration?

FEW successful administrators have gone directly into administration from the college or university. They have begun as classroom teachers. After an individual has served his apprenticeship in the classroom, he has to decide whether he will remain a teacher or take some graduate work in educational administration and try to become a school executive.

The choice of administrative work often is made for economic reasons and not because of special interest in administration. A man with a family dependent upon a teacher's salary usually finds it necessary to supplement his salary by out-of-school work. Or he attempts to climb higher up the salary ladder by the administrative route; and thus it is that many a good teacher becomes a mediocre administrator.

On the other hand, many an excellent classroom teacher becomes a good administrator. He may successfully climb the salary ladder. He may be rated by his fellows and by the community as an outstanding school executive. To all outward appearances, he is a grand success. And yet, only an administrator can know the sacrifices he makes each day because of his position.

Loses Contact With Pupils

There is the loss of happy association with pupils and fellow teachers which only a teacher can have. Perhaps the chief reason why men and women like to teach is the inspiring and refreshing contact in the daily work with boys and girls. This classroom contact is lost to the administrator. True, if the school system is small enough, the superintendent may be able to devote some

Economic pressure pushes many good teachers out of the classroom and into administrative posts, with results that are not always happy

By A. H. HORRALL

of his time to classroom visitation, but when he does this he goes primarily to observe and counsel with the teacher. Any pupil contacts that come are incidental.

There is no opportunity for the superintendent to watch the day-by-day development of children. He cannot point with pride to the improvement of a boy who has been under his direction every school day for a semester or a year.

Must Always Be Impersonal

So many of the human, personal contacts that make the life of a teacher worth while are denied the superintendent. The administrator must content himself with dealing with adults. His actions toward them must be impersonal. As the head of a school system, there are times when he does not dare offer special assistance where it is needed; some member of his staff might misconstrue his actions. As a public servant, he must never permit an occasion to arise for anyone to charge him with playing favorites.

Most people enjoy the companionship of others of the same vocation. This is true of teachers, some times so much so that they are called clannish. When the superintendent has no deputies or assistants, he often is obliged to find his companionship and fellowship outside of his profession. He dares not become particularly friendly with any of his teachers or with one or two of his

principals to the exclusion of the others. He must accept a semi-ostracism as part of the price he pays for being an executive, and he tends to remain out of social life or to limit himself to the society of persons not associated with the schools.

Often the latter requirement is the best thing for the executive; he needs the business and professional contacts he gets through service clubs. But he is fortunate indeed if he can find someone outside of his profession who is willing occasionally to lend a sympathetic and discreetly confidential ear to his troubles.

Nor is the administrator the only member of his family who suffers because of his position. The children of the school executive often do not have a fair chance in school. If the administrator's youngster is inclined to be mischievous, he can "get away with murder" and the chances are the father will not be informed. If the child is lazy and does not work in school, he will probably be passed to the next grade with better than average marks. If the child is superior (occasionally the children of school people do rank high in intelligence), the executive who is conscientious will hesitate a long time before permitting him to skip a grade. Such permission might be used as a wedge by dozens of overly zealous parents who are anxious to push their own offspring too rapidly through school.

The superintendent is a focal point

for annoyances, petty and not so petty. Teachers and others seeking employment or favors come with appeals—or their friends buttonhole the superintendent in their behalf; principals complain about teachers; teachers complain about principals; parents complain about teachers and principals; local politicians, business men and all manner of propagandists come with their axes to grind.

An administrator seldom has the satisfaction of starting and completing some unit of work himself. It is one of his duties to delegate as much work as possible to other members of his staff. He frequently thinks of things he wants to try out in his schools but the actual trying is done by someone else. His sole satisfaction along this line comes when, at a convention or institute, he is given the opportunity to tell of his work.

Must Keep Ear to Ground

The superintendent usually is appointed or elected by a board of directors which has the authority to dismiss him when the occasion arises. The members of the school board generally are elected by the people or appointed by a political office holder. This condition makes it necessary for the superintendent constantly to have his "ear to the ground" for political rumblings that might affect the school system or his tenure of office.

True, the salary of the superintendent is higher than that of other members of his staff; he attends conventions in other cities; he does not have to work by the clock and follow a definite program all day long; his office entitles him to certain social privileges that other school people do not have; he has the satisfaction of being able to make plans for the future development of his schools.

But do these advantages offset the disadvantages of the office? Or is there an even greater satisfaction that comes to the good administrator—that of knowing his work makes it possible for scores or hundreds or thousands of good teachers to be happier, more effective teachers?

Financing Student Activities

By WALTER L. BUMGARDNER and JOSEPH E. BARBER

BACK in the "good old days of '29," our athletic association had a respectable balance. Large crowds attended the various contests and any question of equipment was simply one of ordering the desired number of units. At that time the junior play and the operetta were paying propositions. The school simply announced an activity and that alone assured an excellent attendance. Then came the economic upheaval!

Within two years the athletic association was in straitened circumstances. Even transportation of the team to out-of-town games became a question for deliberation. The crowds for activities other than sports became a mere handful, usually consisting of the parents of the participants. The cast of a play rejoiced when it made expenses.

The serious part of the whole business, however, lay in the fact that pupils were financially unable to attend the productions of the school. The question became one of how to encourage the pupils to save a few pennies each week to attend every activity in which they were interested. We came back from a national meeting with information concerning a student membership ticket for all activities. This seemed rather expensive to us. From this idea, however, and from our own financial condition, the S. A. F. (Student Activity Fund) was born.

Activity Budget Prepared

Faculty sponsors and pupil leaders of all activities were called together and this group prepared a budget of the amount of money necessary to carry on for the next school year. Careful estimates were prepared by this group based upon a study of previous records and present needs.

We tabulated figures from each school activity representing income from pupils, adding to that the cost

of those activities that had no income. We considered this total a minimum for operations.

Our next problem was to enable pupils for the same amount of money they had previously spent for six or eight admissions to attend all the activities covered by our Student Activity Fund. We computed that by selling memberships to 60 per cent of the pupils at ten cents a week over a period of twenty-five weeks the budget would be met, and these pupils would have a pass admitting them to all sporting events. In addition, they would receive the semimonthly issue of the school paper, an operetta ticket, a junior play ticket, admission to two evening dances and ten Friday afternoon social hours.

Parents Like It Too

The proposition was welcomed with an overwhelming response. Nearly 80 per cent of the pupils in the last six years of the school purchased memberships. On the first day the question was asked, "How much will it cost if we pay cash?" The administrators quickly went into a huddle and decided to sell for \$2 in cash. The response was such that the budget was met within the first week.

Parents called and telephoned to express their approval of the plan. It was a decided success the first year and we ended the school year with a balance in the treasury.

This year, the student body has been given the benefit of last year's surplus and membership tickets are 50 cents less than last year. Parents and other adults who were interested in the school activities asked if they might join the Student Activity Fund. The privilege has been extended to them on the same basis as it is offered to pupils. All of our bills are paid.

Our teams are well equipped. The public is more interested than ever.

Will Social Changes Bring a Building Boom?

By A. F. HINRICHS

IT IS of course a truism that the content and methods of education cannot be conceived in abstract or general terms. Their appropriateness must always be appraised in connection with specific cultural objectives. We educate for some end: to make good head-hunters or country gentlemen; preachers or contented, competent peasants.

In broad terms "the task of education is to equip children and adults with the intelligence, resourcefulness, courage and emotional stability to deal with the culture in which they find themselves." But when all is said and done you come back to the situations of particular groups in a particular age. An ideal education for head-hunters would bring about the downfall of the British Empire, while an Oxford training would probably have left the Piltdown man without progeny.

Methods Change With Culture

This of course is obvious, but its corollary is less apparent, namely, that an educational system adapted to any one culture fails to meet the needs of a new society; and, further, that any profound change in the social scene must be accompanied by almost equally marked changes in educational methods and specific objectives.

Unfortunate it is that the traditional methods of education of a given day tend to be invested with a sort of universal worth unrelated to social objectives. How true this is of our retrospect is shown by the fact that we date "universal education" from the nineteenth century, whereas the evidence of anthropologists leads me to believe that never have people been universally so well equipped to meet the problems of their day as

they were back in primitive times.

If the educational process were to have a constantly changing content to meet the developing needs of the society, educators would have to demand a pattern of that society. The fact that no social group in the United States has the power to say, "This is the shape of things to come," the fact that only a negligible number of individuals in the United States have clearly thought out what they, as individuals, would like to see, means that educators can plan only partially and in a limited sense to meet the needs of society. Without clear-cut social objectives there can be no perfection in educational plans.

Lacking any socially authoritative directives, resort must be made to a study of the most significant lines of social drift.

By way of illustration I want to cite five recognized social trends in the United States and to suggest certain implications that they have for educators.

Five Social Trends

1. The United States is ceasing to be a young man's country. The population is rapidly stabilizing with a consequent increase in the proportion of the middle-aged and old.

2. The educational process is being extended and intensified, partly because the modern production processes demand greater training, partly because of a democratic insistence upon access by all to the higher types of training, partly because it is a means of absorbing opportunity for leisure without new and painful thinking.

3. Lack of employment opportu-

nities for a large proportion of young persons in age groups in which gainful employment used to be common is to be regarded as a continuing phenomenon.

4. The extension of machine processes is destroying the value of specific skills and is placing a premium on generic aptitudes.

5. The high birth rate areas in the United States where the population is more than reproducing itself are the farms and rural nonfarm areas. The population of farms is decreasing because of migration, however.

What do these facts mean, if education is to equip children and adults to deal with the culture in which they find themselves?

The changes in population growth obviously are translated into school attendance figures. The census of 1930 showed 1,160,000 less children under five years of age than in the age group five to nine inclusive. The population under five years of age was actually 130,000 smaller in 1930 than in 1920. The Massachusetts census of 1934 shows 387,562 children from ten to fourteen years of age; 361,573 from five to nine years of age, and only 300,326 under five years of age. School attendance will of course be affected, but this is not the most fundamental problem for educators.

Fewer Opportunities for Work

The closing of the frontier and the cessation of population growth imply a less rapid rate of economic expansion than in early years; in other words, the development of fewer new opportunities. The increased proportion of older people means that exist-

ing opportunities are more difficult for youth to secure. In 1900 for every 1,000 persons from twenty to thirty-nine years of age there were 601 in the age group forty to sixty-four; in 1920 there were 685; in 1930 there were 752. Young people will soon have to wait for death to empty the French, Shriner and Urner shoes.

No Longer Training Leaders

What are the schools and colleges doing to shift attention from the search for the lucky break to the tests of excellence, and such other tests as will increasingly govern advancement? To what extent is it realized that we are not training leaders, but are training to enrich the process of living for men and women in the humblest of posts? How fully have the schools and colleges appreciated the fact that social forces—not the depression but well established trends—are undermining reliance on individualism, and are forcing young people to turn to collective effort to expand the field of opportunity to the limits set by nature and by man's understanding of natural forces?

Or again consider the problem that the colleges face as the scope of the educational process expands. My parents were educated when about 150,000 men and women were enrolled in schools of collegiate grade. I was graduated when 460,000 were so enrolled. My children may well be three lost souls among a million and a half, for already college enrollment exceeds 1,000,000. What does this mean? Obviously it means in the first place that a certificate of education ceases to have value. For better or worse we have inflated the currency, and prospective private and public employers will pick and choose among your A.B.'s and Ph.D.'s as carefully as the true antiquarian paws over the goods on the counters of a secondhand store.

In the second place it means that an educational system that stems back to the needs of a leisure class is quite out of date. The men and women entering our colleges cry out

for something "practical." They are the sons and daughters of poor farmers, of clerks, of mechanics, even of the unemployed. They are looking for something—they don't know what—that we are supposed to give them. A pathetically large proportion fail to find purpose in the hodgepodge of scholarship, culture and "practical" courses that we call a curriculum. Schools must face completely the question of the life that these people will lead and must train for this life in all its phases as intensively as possible—but for this life, not for the heretofore.

This implies changes both in the curriculums that we regard as vocational or professional, and in those whose lack of purpose is concealed by the adjective "liberal." In view of the increased resistance to self-fulfilment through economic advancement, our educational system must develop a larger capacity to enjoy living with one's own mind and hands.

In the third place, the lengthening of the educational period for an increasingly large proportion of the population involves a task that has not yet been met in urban education—the task of integrating the process of formal education with life. How can you recreate the integral experience of the farm boy? The evidence of the colleges is that the present-day product of the high schools and early years of college is completely cut off from reality.

Little Harvards Not Needed

Finally, so far as concerns my discussion of the increased extent of formal education, let me point out its implications as regards quality. Today every institution of higher learning, with a few radical exceptions, aspires to be a little Harvard. There are approximately 9,000,000 persons of college age, ranging in capacity from genius to imbecility. I see little evidence, even in our present college population, that there are 1,000,000 people who can truly avail themselves of the best that Harvard can offer. Each 100,000 that is added will lower

the level of capacity, especially insofar as there are also financial tests of selection that exclude from the colleges some people of marked capacity in the lower income levels.

In the grades we face the question of deciles and quartiles. In the colleges and high schools we must shift from the basis of a democratic identity of treatment to a true democracy of opportunity to share in the highest type of experience of which the individual is capable. Instead of building first, second, third and fourth-class Harvards, we need more or less noncompeting schools, each so far as practicable to be excellent but serving different ends. However, as we classify our educational opportunities we must give even greater attention to the problem of shifting objectives.

Unemployment Not Temporary

I mentioned as the third social trend the increasing unemployability of young persons without training. Unemployment today bulks largest in the age groups below twenty-one. This is not a temporary phenomenon. It is one of the factors forcing the growth of our high schools and colleges today. But it brings us face to face with the problem of financing these as years of training—as years of vital experience—rather than having them contribute each year a quota of permanent unemployables.

In the fourth place I would refer you to Walter N. Polakov's "The Power Age" for a description of the aptitudes called for by a machine age. The specific skills of a particular craft are exposed to fire from a thousand laboratories. The manual dexterity of handling a given machine on which the process can be learned in a few months should be included in a training program only under the heading of vocational miseducation.

The employment service of the U. S. Department of Labor is now trying to classify processes in broad zones of interchangeability that cross industry lines, that even involve very different manual operations. The common denominators are certain fundamental aptitudes and attitudes.

Finally, let me call your attention to the fact that the differential birth rate, as a long-run factor, and the unemployment of several millions of young persons, as an immediate factor, force us to think of this vocational or functional training in national terms. Our youngsters are being bred on farms and in rural nonfarm areas. There are huge migrations from these areas to the cities.

Economic recovery and advance depend upon the development of new types of activity. This has been true in the past. It will be true of the future. You cannot train for specific facility in types of work that do not exist. You should not train for processes that are likely to disappear or to offer a shrinking opportunity. Just as the land grant colleges have poured new blood into city occupations and would have rendered a much smaller service if they trained only farmers, so we must develop more extensively a training, not for the indigenous occupations of the high birth rate areas but one that will afford the broad foundation on which new types of activity may be built.

This does not exhaust the list of recognized social trends, all of which will have repercussions on the educational process, nor does it pretend to be a final analysis of the implications for education of such trends as have been discussed. It does illustrate the thesis that basic technological economic and social developments condition the educational process and, as an immediate corollary, the school building program that will make possible new educational methods and points of emphasis.

The changes in school population determine the amount of building that is necessary. Shifts of population and changing means of transportation should determine location. The objectives of education should govern the plant design. The needs that I have cited require auditoriums, libraries, scientific laboratories, special consideration for art and music, if the schools are to meet the vast task that lies ahead.

This all implies larger expenditures

for education. How can the costs be met? By way of indicating the answer let me cite the Report of the National Survey of Potential Product Capacity. This report attempts to determine the approximate labor requirements of a budget that will satisfy the basic needs of all of the population. In many industries the reasonable needs of the population can be satisfied with less labor than was attached to those industries in 1929. In all manufacturing employment might rise from 10,000,000 in 1929 to 11,600,000 to meet budget needs. But to satisfy a reasonable program for education would involve expanding employment from 1,069,000 in 1929 to 2,900,000, the largest per-

centage increase in any type of employment. These are hypothetical figures, engineers' estimates of the amount of labor necessary to produce what it is believed the nation needs.

An economic society geared to effective demand rather than need will expand in quite different proportions from those indicated in this report. These estimates do, however, show the lines of probable expansion and the points at which intense resistance will be encountered to further development. Education is one of the outstanding fields for expansion in an economy of developing abundance. Educators have no reason to be modest in outlining their needs, if they are adequately to serve this society.

New Life in an Old Curriculum

By FRANCIS J. FLYNN

IN THE past few years much has been said challenging methods, materials, curriculum and even our philosophy of teaching on the secondary level. Some teachers are still hesitant about recognizing the challenge, but most school people recognize and admit the seriousness of it. However, most teachers believe that it is principally an administrative or supervisory problem and that there is little they, as individual teachers, can do to meet it.

This line of reasoning is fallacious. There is much each individual teacher who recognizes and accepts the challenge can do to inject new enthusiasm and a broader social philosophy into his courses.

We must, I believe, consider this problem of curriculum revision or reevaluation a personal one—one concerning all teachers individually. Revision must come slowly and emerge from each individual class by means of careful, well-planned and organized experimenting. It is decidedly wrong to assume that we must “junk” our present curriculum and start all over again. This is a false approach

to the problem and is more likely to result in further criticism than to produce an answer to the present challenge.

“Introspection” should be the keyword to revision or reevaluation and should be the motto of each teacher. We should carefully, thoughtfully and broadmindedly analyze our individual courses. We must find little spots that seem, from experience, to lack purpose in present life as far as the pupils are concerned—he who is honest with himself will probably find many such places—and then we must endeavor to inject new life and new purpose in place of the old. From this humble beginning, a new curriculum will eventually grow that will answer the challenge of society with confidence and integrity.

When each individual teacher can answer the challenge with a smile of confidence and demonstrate to all that his course serves in a small way to develop a useful member of society and, above all, a happy, contented individual; then, and then only, will the challenge of society have been answered.

IT MAY be stated as an axiom that any policy that does not serve the interests and promote the welfare of American childhood should be promptly abandoned. With this axiom in mind, let us consider impartially and dispassionately the matter of consolidation of schools as an administrative policy.

From the establishment of the first county and city superintendencies in 1836, this country has experienced a dual development in rural and urban education. Owing to the concentration of wealth in cities, rural sections have been unable to develop their schools to a degree in any way comparable with the educational progress that has been made in cities. Hence, many states are encouraging and sponsoring the consolidation of rural schools with a view to equalizing the educational opportunities and advantages of rural and urban children.

Called Wasteful and Inefficient

This program has advanced to a point at which, in many states, smaller city school systems are being urged and, in some instances, forced to become a part of the county unit of organization.

We are told that the one-room school has outlived its usefulness and that henceforth it must renounce its influence as a factor in community life. With the advent of good roads and motorized transportation, large consolidated school centers are being established to absorb the one-room schools.

Advocates of consolidation have advanced many arguments against one-room schools. The chief indictment is that one-room schools are wasteful and inefficient. More specifically, poorly qualified teachers, lack of equipment, poor school attendance, inadequate supervision, the development of narrow sectionalistic prejudices and family feuds are cited as reasons why the one-room school must go.

At first glance, the foregoing arguments appear to be sound. We

should like, however, to ask two questions. First, assuming that one-room schools are wasteful and inefficient for the reasons mentioned, should we place the responsibility on the one-room school, as such, or should we fix the blame on faulty school administration? Second, will the consolidated school remedy the conditions that are said to prevail in one-room schools?

These questions suggest that the one-room school may not be the root of all educational evils. It may be possible to provide every rural community with a well built, well lighted, well ventilated and well equipped schoolhouse, presided over by a teacher with the highest scholastic and professional preparation. We can readily conceive of a good teacher who has the ability to handle efficiently the work of six or even eight grades in a one-room rural school.

Individual Instruction Possible

The question is now, and always has been, a question to be answered in terms of sound school administration, vested in professionally minded and progressive superintendents and boards of education. Properly administered, there seems to be no reason why a county school system made up of one-room schools should not be as economical and efficient in operation as a county school system made up of consolidated schools.

At the same time, it is possible for a consolidated school system to be wasteful and inefficient for the reasons that are ordinarily offered as arguments for abandoning one-room systems. Poor teachers, irregular attendance, lack of equipment and in-

adequate supervision are to be found in any school, regardless of size. It is manifestly unfair to condemn the one-room school on the basis of conditions that may apply with equal force to other types of schools.

The consolidated school is said to possess one major advantage over the one-room school, namely, the possibility of offering individualized and differentiated curriculums by the departmentalization of instruction. The consolidated school is in position to sponsor a program of extracurricular activities on a scale that is not practicable in a one-room school. Undoubtedly, individualized instruction, differentiated curriculums and extracurricular activities are desirable in any type of school. We submit, however, that the one-room school teacher is in position to provide all these for his pupils, not on a large scale, but to a degree consistent with the needs of his small group. In this connection, the one-room school teacher will find almost limitless opportunities for service to the community in which he works.

Is Departmental Teaching Superior?

Departmentalized instruction is admittedly impossible in the one-room school. Let us bear in mind, however, that, from the point of view of results to pupils, no data are as yet available to show that departmentalization is superior as an instructional device to the traditional type of organization. Some few studies of this question have been made, but the results have been vague and inconclusive. Hence, we cannot concede that children in one-room schools are placed at a disadvantage in this regard.

A Good Word for Arguments Against Consolidation

the One-Room School

By R. F. PETERS

The elimination of one-room schools by the establishment of consolidated schools has brought to our attention certain pertinent factors that are applicable to school organization. In the first place, the old idea that the school is a potent influence in community life and development seems to have been abandoned.

Loss of Contact With Homes

Formerly, the one-room school was regarded as a community center. The school was, potentially at least, the nucleus around which revolved the social, and even the religious life, of the community. Community gatherings, public speakings, agricultural club meetings, educational gatherings, literary societies and spelling bees were held at the schoolhouse. It was possible for a wide-awake teacher to establish a close and wholesome relationship between the home and the school.

For the most part, the country school teacher lived in the community and was a welcome visitor in the homes of his pupils. He knew his patrons personally and was interested in their problems. He built himself into the social fabric of the community and assumed an honored place in the lives and affections of his patrons and pupils. In short, the school was the foundation stone of the social structure of the community. We venture the suggestion that savings in dollars and cents and increased efficiency, which are claimed for consolidated schools, will hardly reimburse a community, in a social and spiritual sense, for the loss of its one-room school.

In the second place, it is interest-

ing to note the reactions of many parents to the question of transporting pupils to and from consolidated school centers.

Mr. Johnson lives two miles from a point on the highway where the school bus ordinarily stops. No matter how inclement the weather may be, his children must wait for the bus at the designated place. The bus may be on time or it may be late. His children must leave home very early in the morning in order to avoid missing the bus. When the bus arrives, they are placed aboard and taken to school. They are returned to the bus stop late in the afternoon, or evening, if there happens to be car trouble, and are obliged to walk two miles to their home.

Formerly, these Johnson children may have had to walk four miles a day to and from their one-room school, but they would not have to stand in rain, sleet and snow to wait for a bus. He also knew what time they would get to school and what time to expect them home.

Difficulties in Transportation

Mr. Ross is the bus driver. On his shoulders rests the responsibility of taking the children to school and returning them to their homes safely. In addition, he is expected to exercise a certain amount of supervisory authority over the children in his care. Mr. Ross knows nothing about managing and supervising children. Hence, disorder and misconduct usually prevail in the bus that Mr. Ross drives.

Oscar Jones lives on a farm. His father belongs to the old school. He expects his son to help with the farm

work, cultivate habits of industry and eventually run the farm. The boy leaves home too early and returns too late to be of much assistance on the farm. Hence, Oscar develops habits of idleness, becomes dissatisfied with farm life and finally leaves home to join the unemployed masses in the city.

The foregoing illustrations serve to call attention to the many transportation problems.

In the third place, the consolidated school may labor under the disadvantage of being out of touch with the various communities that it is designed to serve. Of necessity, the teachers know little about the home life of their pupils. By the same token, the parents know little about the school that their children attend. It is obviously impracticable to establish the unity of interest and wholesome cooperation of parents and teachers that would be possible in a small one-room organization.

Political Manipulation Less Likely

Consolidated schools often lend themselves to selfish political manipulation. In the hands of the wrong kind of county school administration, it is not difficult to conceive of consolidated schools becoming veritable hotbeds of political wrong-doing, manifesting itself in the selection of teachers on a basis other than that of professional merit, and in the spending of public money in ways that would not bear close scrutiny.

All consolidated schools are not politically controlled. As a matter of fact, any type of school organization may be made to serve the selfish purposes of a political machine. However, a consolidated school system is more susceptible to pernicious political influence than is a one-room organization.

Finally, the continued establishment of consolidated schools brings us face to face with a problem that is becoming more and more acute in American education, namely, the centralization of educational authority

and control. The schools are moving farther away from the homes and the people each year. Complete county unit organization is the first step toward autocratic state control. Eventually, we may expect to see a national system of education. Uniformity, regimentation and overstandardization will follow as a matter of course. It is possible that such a development would be beneficial to American education. It is undoubtedly true, however, that nationalized education is inconsistent with American democratic ideals and principles.

Objections to the County Unit

The latest development in the consolidated school movement is the merging of smaller city school systems with county school units of organization. The same arguments are being advanced for school mergers as have been used in support of one-room school consolidation. It is claimed that efficiency and economy of administration and better educational opportunities for children will be provided when small city systems revert to the county system.

In most states, there are two types of school organization—city schools and county schools. These two types have experienced parallel growth. Owing to higher assessments and concentration of wealth, the city schools have been in position to provide better educational opportunities for children, especially of secondary level, than have the county schools. In most cases, city schools have accepted and educated secondary pupils from county districts upon the same basis as pupils from the city districts. In cases in which high school facilities were not available for county pupils, county boards of education have been asked to pay a reasonable tuition rate to city boards for the education of county pupils in city high schools.

In order to effect economies in this connection, the suggestion is being made that smaller city school systems be absorbed by county school systems. In the course of time, larger city systems would be subjected to the same process. It may be stated

here that there is no valid reason why a county may not provide school facilities for its own secondary pupils. Our contention is that small city schools should not be required to surrender their independent status in order to enable counties to take care of their own pupils.

Let us consider briefly the case for the small independent school that finds itself confronted with the possibility of being forced to become a part of the county organization.

Many smaller city school systems became independent units as a result of their willingness to maintain high standards by the levying of higher tax rates than the county was able or willing to levy. As the years have passed, these independent schools have taxed themselves heavily to provide for their children the best possible educational opportunities and training. These schools are now asked to lower their standards, sacrifice their independence and even lose their identity in order that complete county unit organization may become an established fact.

No Assurance of Improvement

If it could be conclusively demonstrated that the county unit plan of organization would assure higher scholastic standards, equality of educational opportunity, more economical operation and more efficient administration, there might be some justification for the use of coercive measures to bring about the merging of smaller cities with counties. As the situation now stands, however, many smaller school systems are being denied the privilege of self-support, with little or no assurance that dependence on the county will provide more adequate educational facilities than the cities have been able to provide for themselves.

Finally, I should like to summarize my argument by presenting certain conclusions.

1. So far as the complexities of modern life will allow, home and school should establish and maintain close and amicable relationships.

2. Educational progress in cities

should not be hampered or obstructed merely because rural education has failed to keep pace. Rather, a more liberal measure of state financial support should be extended to rural schools in order to equalize rural and urban educational opportunities.

3. The one-room rural school should not be condemned and abandoned as an institution because of deplorable conditions that may exist therein. The fault may lie with inefficient county and state administration.

4. Many of the arguments used against one-room rural schools may apply with equal force to other types of school organization.

5. With proper administration and adequate financial support, it seems probable that a one-room school system might function as efficiently as a consolidated school system.

Child Welfare Only Criterion

6. Certain factors operate to the disadvantage of consolidated schools. For example, loss of contact with home and community life, various problems in connection with the transportation of children, the possibility of political manipulation, and the tendency toward overstandardization and overcentralization are worthy of serious consideration by school authorities who contemplate the initiation of a consolidated school program.

7. In the name of economy and efficiency, many small independent city school systems are being forced to merge with county school systems. Such mergers, while sometimes desirable, often do irreparable damage to the schools of the smaller cities. There is no valid reason why counties may not provide adequate educational facilities for their pupils without the necessity of absorbing small city schools.

8. When considering the question of merging and consolidating schools, school authorities should apply one criterion, namely, the welfare of the children in the schools. The application of any other principle will result in injustice, inefficiency and disaster.

Building a Graduation Program

By
STANLEY SCHUBERT

IN AN effort to build commencements around some central theme a committee composed of Supt. Chester F. Miller, I. M. Brock, principal of the Arthur Hill High School, Floyd Allen, principal of the Arthur Hill Trade School, and Stanley Schubert, dramatic instructor, all of the public schools of Saginaw, Mich., planned a pageant which, held at the city auditorium, combined the graduating exercises of the two schools.

The dramatization commemorated the 300th anniversary of the founding of secondary schools in America and portrayed the growth and development of the local schools. The action and tableaux were introduced and interpreted by a pupil reader at the microphone.

Following the processional of the graduates, the curtain opened with a fanfare of trumpets showing the reader (Spirit of the American High School) seated on a throne surrounded by her attendants. This group advanced to the front of the stage where, as a speaking choir, they gave the prologue. The curtain closed, the attendants moved off the stage, and the reader took her place at the microphone.

Episode 1—The Boston Latin School. The reader described the founding and the development of the school. The curtain opened showing

E
P
I
S
O
D
E
1



E
P
I
S
O
D
E
2



E
P
I
S
O
D
E
3



the schoolmaster with his class of boys. The a cappella choir, located behind a velvet back-drop, sang "Send Forth Thy Spirit" by Schuetky.

Episode 2—The Kalamazoo Case. The reader explained conditions out of which came the Supreme Court Decision in 1873 establishing the high school as a part of the public school system. The tableau showed Chief Justice Cooley with his associates reading the decision. Behind the curtain the choir hummed "The Battle Hymn of the Republic," breaking into the words, "Glory, glory, hallelujah! his truth goes marching on," as the reading came to a close.

Episode 3—Arthur Hill's First Graduating Class. The reader told of the early history of education in Saginaw up until the time the first high school class was graduated. The curtain opened to show the class of 1870 composed of four boys and six girls.

Episode 4—The Scholarship Award. Arthur Hill, an early resident of Saginaw, was eulogized by the reader. The history of the Arthur Hill Scholarship was reviewed and that part of the will providing for the endowment was read. The action showed the Saginaw board of education accepting Mr. Hill's \$75,000 gift in 1893. At the close of the tableau the reader announced the winner of the scholarship for 1935, who advanced to the stage to be honored. The band (back of the curtain) softly played Michigan's Loyalty Song during the presentation. The scholarship stipulates that the winner must attend the University of Michigan.

Episode 5—The Arthur Hill Trade School and the Smith-Hughes Law. The "Spirit of the American High School" told of the establishment of the Arthur Hill Trade School through the benevolence of Arthur Hill and indicated how the school was affected by the Smith-Hughes Law. The episode showed President Wilson signing the measure.

Episode 6—The Merit Cup Award. Tribute was paid to the life of Julius W. Ippel, a former resident of Saginaw, in whose memory the

Ippel Merit Cup is awarded yearly to the outstanding graduate. The cup was presented by the reader to the winner for 1935. During the presentation the hidden choir sang "I Would Be True" by Peek.

Episode 7—Looking Forward. The reader pictured the growth and development of the two schools over a period of sixty-five years. School officials were then introduced and diplomas awarded to graduates as they marched past a second microphone. The graduates formed back of the velvet curtain as they left the stage. The "Spirit of the American High School" and her attendants moved to

the front center of the stage and read a poem written for the occasion.

As the reader and her attendants moved back-stage to take their original positions on the throne, the velvet curtain rose showing the massed graduates as they looked upward at a vision of a modern high school, which was made to appear in the upper back-stage. The school banners were unfurled and the audience stood as the band played and the graduates sang the school songs. While the Spirit and her attendants held their positions the audience and the graduates sang "America" as the curtain slowly fell on the spectacle.

Mathematics and the Consumer

By ANNE L. COWAN

FOR several years the high school curriculum has been under fire, and mathematics has come in for its share. We realize that conventional mathematics courses are not meeting the demands of our changing times. The world is becoming functional minded and consumer conscious. The weather, the bank rate, prices, production, unemployment and conditions of trade, all are functions of many variables, known or unknown.

There is a certain phase of mathematics that is needed by the average person in any day of his life. This includes not only the fundamentals but the concepts, processes or principles as related to the life of the individual as a consumer and as a citizen, such as principles of percentage, intelligent buying and types of buying, savings and insurance.

Every individual is a consumer at some time and as a consumer he faces certain definite problems regardless of his economic position. Whether from the standpoint of health or of merely getting his money's worth, no person cares to consume a poor grade of food, and few desire to pay high prices for inferior goods.

To meet our part of the responsi-

bility and to give the consumer a "break," our mathematics department is offering a course called Consumers' Mathematics. In the course we are using the quantitative approach and are stressing intelligent buying and the factors that prevent the consumer from getting the most for his money.

The aims of the course are as follows: (1) to teach pupils how to buy to better advantage; (2) to develop an appreciation of the need for better management of income; (3) to teach the necessity, purpose and plans of saving as an aspect of consumption; (4) to impart knowledge of where and how to obtain information needed in every day life situations; (5) to bridge the gap that has existed between conventional mathematics courses and actual life situations; (6) to teach pupils to think as consumers—to evaluate the influence of advertising, salesmanship and slogans on buying; (7) to teach the new economic principles that apply to consumption in the home and to emphasize the value of intelligent buying, and (8) to give the pupil an understanding of the economic status of the consumer.

Taking Tenure to Court

By M. M. CHAMBERS

LOCAL boards of education sometimes fail to appreciate the social values involved in teacher tenure laws, and consequently from time to time resort to various subterfuges for the purpose of nullifying the legislative intent and evading the provisions of the statute.

One of the most encouraging elements now observable in the slow but steady progress of the principle of reasonable permanence of tenure is the fact that the highest courts of the several states having tenure laws frequently rebuke local school boards which resort to surreptitious circumvention in order to defeat the public policy of the state in this respect after it has been proclaimed by the legislature.

Courts Enforce Tenure Laws

Some of the most recent examples of judicial reprimand for those who would evade the law come from the state of New Jersey, which has the distinction of having enacted in 1909 the first statewide teacher tenure law in the United States. It seems that the board of education of Hoboken, overcome by the supposed necessity of drastic retrenchment during the depression, resorted to the extremely dubious device of dismissing thirty-four permanent teachers by discontinuing the particular schools to which they were assigned.

The color of this transaction was darkened by the fact that twenty-six of the dismissed teachers were newly transferred to the doomed schools on the same day and at the very board meeting in which the resolution to discontinue these schools was adopted. At the same time the board retained seven nontenure teachers.

The discharged permanent teachers

appealed to the state board of education and obtained an order for the reinstatement of seven of their number in positions held by nontenure teachers, and for payment of salaries for the full current school year to all of their number. Unwilling to accept this order, the Hoboken board carried the case to the courts, where the order was sustained finally by the highest judicial tribunal.¹

More recently, as a sequel of this long-drawn-out legal controversy, seven more of the wrongfully displaced permanent teachers have been granted a writ of mandamus compelling the board of education to reinstate them in place of seven substitute teachers who have performed their duties in the interim without the protection either of permanent tenure or of the regular salary schedule. In concluding its opinion embodying this order, the court has made the following resounding statement concerning the crass and clumsy attempts to circumvent the tenure law at Hoboken:

"The Teachers' Tenure Act is not a gesture, but a provision of law to protect teachers in their positions by reason of years of service. . . . The action of the board was the merest subterfuge to defeat the legislative purpose, the decision of the state board of education and the courts of this state. . . . Seven of those now seeking reinstatement in the place of the special substitute teachers are clearly . . . entitled to a writ directing the employment of teachers having tenure in place of substitutes now regularly employed under whatever title designated."²

¹*Flehtner v. Board of Education of Hoboken*, 118 N. J. L. 401, 174 A. 529 (1934), affirming *Downs v. Same* (N. J. Sup.), 171 A. 528 (1934).

²*Downs v. Board of Education of Hoboken* (N. J. Sup.), 181 A. 688 (1935).

Judicial reprimands are frequent for school boards that attempt to evade teacher tenure acts. Boards are slow to see the social values involved in these laws. The color of some of the local subterfuges outlined is exceedingly dark.

The present California tenure law provides that after having been "successfully employed by the district for two or three complete consecutive school years" (whether two or three being at the option of the board), a teacher becomes entitled to classification as permanent if reemployed. The statute is silent as to what shall constitute a "complete school year" within the meaning of the foregoing clause.

Interpretations in California

The Los Angeles board of education has assumed the right to determine this question, and adopted a rule that 195 days of teaching shall constitute the minimum for a complete school year within the meaning of the tenure law. Recently a teacher who had been reemployed after three successive years of teaching in Los Angeles petitioned for a writ of mandamus to compel the board of education to classify him as a permanent teacher.

The board responded that under its existing rules regarding the counting of absences and allowances for sick-leave, this teacher could be credited with only 193 days of teaching during the first of the three consecutive years upon which he based his claim

for permanent status. The court of appeal, by a divided vote, sustained the position of the board of education in this controversy and denied the writ.

The presiding judge dissented from the majority opinion, and expressed his belief that even though the statute did not define what should constitute a complete school year, this question should not be regarded as within the discretion of the board of education, but rather should be determined by the courts as a matter of statutory interpretation. He went on to say that he could not believe it had ever been the legislative intent to deprive a teacher of his right to permanent status after he had substantially met all requirements of the statute, as had the plaintiff in the present case.³

Generally teachers' tenure laws provide that a school district may lawfully dispense with the services of a teacher who has been engaged in some special or particular service, if for any reason the particular service is discontinued and not thereafter resumed. For example, the California law declares, "It is hereby provided that whenever it becomes necessary to decrease the number of permanent employees in the school district on account of the decrease in the number of pupils attending the schools of such district *or on account of the discontinuance of a particular kind of service in such district*, the governing board may dismiss such employee at the close of the school year."

"Particular Kind of Service"

In San Luis Obispo a permanent teacher had been employed since 1930, and had been continuously assigned to a special room and class of mentally retarded pupils. In the summer of 1932, as a retrenchment measure the board of education discontinued this class and notified the teacher that her services would no longer be needed. Maintenance of the special class for retarded pupils was wholly optional with the board, not being required by any statute.

³Richardson v. Board of Education of Los Angeles City School Districts (Cal. App.), 510 P. (2d) 1162 (1935).

The teacher sought reinstatement by writ of mandamus, contending that the test of a "particular kind of service" within the meaning of the statute should be whether or not the teacher performing it was required to hold a particular kind of certificate. She pointed out that for her position no special certificate was required, and argued that for this reason it could not be classified as a type of service such that its discontinuance would justify her dismissal.

The court of appeal, again by a divided vote, denied her contentions and held that the board of education was clearly within its rights as defined in the tenure law. Again the presiding judge dissented from the majority opinion, but did not commit to the record the reasons for his dissent.⁴

Supreme Court Opinion Divided

Another California case involved an even more difficult definition of what constitutes a particular kind of teaching service within the meaning of the tenure law. The Berkeley school district classified its professional employees in the kindergarten department in three categories: (1) kindergarten director, (2) associate director and (3) assistant director. Employees of each of these ranks were on different salary scales, but in fact they were all engaged in kindergarten teaching and there was little if any substantial difference in the character of their work except for the fact that the director performed certain routine administrative duties in addition to teaching.

The board of education abolished the positions of associate director and assistant director and relied upon this action as justification for its dismissal of persons employed in these positions. This action of the board was upheld by a majority of the supreme court as being lawful under the tenure statute; but two of the justices vigorously dissented.

In his dissenting opinion, Mr. Justice Langdon said:

⁴Schwalbach v. Board of Education of San Luis Obispo High School District (Cal. App.), 52 P. (2d) 497 (1935).

"I think the foregoing opinion misinterprets the provision of the statute and sanctions a device which may in hostile hands destroy the system of the teachers' tenure. That system has raised immeasurably the dignity and professional competence of our teachers, and the legislative act which established it requires an interpretation which carries out, and not one which defeats its purpose. . . . Once a group of teachers is classified in those convenient but useless brackets, what is easier than to cut off the appendages and terminate the employment of teachers so classified?"

Further, he continued, "a teacher who teaches in a kindergarten is rendering the same service whether called a director, associate or assistant. Aside from immaterial clerical duties assumed by the director, the service performed—the teaching—was exactly the same. How can it sensibly be said that the plaintiff, a kindergarten teacher, has been dismissed because of discontinuance of the service, when others remain to teach the same thing in the same way? The sole purpose and effect of the arbitrary classification of the so-called services in this case were to do what the law forbids—permit the discharge of a permanent teacher whose subject was still taught."⁵

Details Will Be Worked Out

In view of the division of judicial opinion above exhibited, it seems that further statutory revision and administrative experience will be necessary before the actual effect of tenure laws in commonly disputed cases can be forecast with much certainty.

Given a little more time, no doubt a reasonably stable and reliable body of precedents will be evolved, such as to safeguard the social values as well as the individual rights involved in the principle of teacher tenure. The principle, once embodied in statute, is everywhere upheld by the courts; it is only certain details of its application that require further adjudication.

⁵Fuller v. Berkeley School District of Alameda County (Cal.), 40 P. (2d) 831 (1934).

Trends in Textbook Placement

By FRANK E. ALLEN, HEROLD C. HUNT
and FRANK A. JENSEN

AT THE request of the National Council of Education, a study has been made to determine the current procedures and methods of getting textbooks from the publisher to the pupils.

A questionnaire was sent to cities with populations of 25,000 or more covering the following points: (1) Do pupils purchase their textbooks from a local dealer? (2) Are free textbooks provided, the local board of education buying the books and furnishing them to pupils without charge? (3) Do pupils purchase their textbooks from a school store? (4) Do pupils rent textbooks from the board of education? (5) Is a combination of these methods employed? (6) Is some method other than one of the foregoing in use?

The questionnaire also called for from three to five brief statements supporting the method used in the school system reporting.

Three hundred and nineteen questionnaires were returned. The answers were tabulated by states and by cities according to populations. In many instances the reply given made it necessary that we interpret the answer in order to place it in the tabulations. In some instances our interpretations may be in error.

In tabulating the results by populations the cities were grouped into five divisions, cities having populations of 25,000 to 50,000, 50,000 to 75,000, 75,000 to 100,000, 100,000 to 500,000, 500,000 or more.

Principal Facts Revealed

Without reproducing the five tables here, we shall outline the outstanding facts as revealed by the questionnaire.

The three hundred and nineteen questionnaires returned represented

86 per cent of the number of cities with populations of 25,000 or more.

From the states of Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Iowa, Kansas, Maine, Maryland, Nebraska, New Hampshire, New Mexico, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Utah, Virginia and the District of Columbia all questionnaires were returned.

California, Connecticut, Illinois, Indiana, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, Washington, West Virginia and Wisconsin returned from 80 to 99 per cent of the questionnaires. No returns were reported from Delaware and Louisiana. There is one city in Delaware and four in Louisiana with populations of 25,000 or more.

Tabulation Difficult

The tabulating of the returns from the questionnaires was made exceedingly difficult in view of the fact that many questionnaires were not answered according to the form.

Fifty-nine per cent of the cities reporting have free textbooks; 22 per cent have a combination of two or more methods of getting textbooks to children. Ten per cent say that textbooks are purchased from local dealers, 5 per cent of the cities reporting have rental systems, 3 per cent, school book stores and 1 per cent report new methods not included in the questionnaire.

The questionnaires reveal the following states to have 100 per cent free textbook system: California, Connecticut, Florida, Maine, Maryland, Massachusetts, Montana, Ne-

braska, New Hampshire, New Jersey, Pennsylvania, Rhode Island, South Dakota, Washington and the District of Columbia.

An examination of the questionnaires reveals the following states have free textbooks or an incoming plan for free textbooks: California, Connecticut, Florida, Maine, Maryland, Massachusetts, Nebraska, New Hampshire, New Jersey, Ohio, Pennsylvania, Rhode Island, Texas, Washington and Washington, D. C.

This list includes two that the foregoing list does not and leaves out two that the list above reports as having 100 per cent free textbooks. From the information provided, it is not clear whether the states of South Dakota and Montana have free textbooks. Ohio is now in the process of adopting the free textbook method. The law was passed in 1934 and the adoption is to be completed by 1936-1937. Texas has 78 per cent free textbooks and 11 per cent under a new method. The new method reported, however, provides free textbooks. Therefore this state classifies as 100 per cent free textbooks.

Somerville, Mass., Led Way

The first adoption of free textbooks, according to the questionnaires, was in the city of Somerville, Mass. The date given for the adoption by this city is 1842.

Oregon, Tennessee and Utah have free textbooks for the first eight grades. The Missouri state law provides free textbooks for elementary schools. The law leaves the choice up to the voters of the district.

Kentucky enacted a law in 1934 to give free textbooks to grades one

through five. It is the plan of the state to add grades six and seven next year. North Carolina has a rental system throughout the state. West Virginia abolished its free textbook law two years ago.

These statistics, as we analyze them, show that nineteen states and the District of Columbia have free textbook laws of one kind or another.

Seventy-two cities, or 22 per cent of the questionnaires returned, report distribution of textbooks to pupils under the fifth division of the questionnaire, or a combination of methods.

Twenty-five cities use the combination method of local dealers and free textbooks; four, local dealers and school book stores; seven, local dealers and rental system; four, local dealers, free textbooks and school book stores; four, local dealers, free textbooks and rental system; one, local dealers, book store and rental system; fifteen, free textbooks and book stores; three, free textbooks, school book stores and rental system; one, free textbooks and rental system; eight, school book stores and rental system.

A summary of the foregoing combinations shows that forty-five cities of the seventy-two reporting under this division of the questionnaire use local dealers partially to distribute textbooks; fifty-two cities have a partially free textbook plan; thirty-five cities use school book stores partially; twenty-four cities have a partial rental system.

One hundred and eighty-seven cities have free textbooks; fifty-two have partial free textbooks, making a total of 239 cities out of 319 reporting, or 75 per cent having a free or a partially free textbook plan.

Thirty-two cities have all of the books distributed to the pupils through local dealers, forty-five partially use this plan, making a total of seventy-seven cities entirely or partially using local dealers.

Nine cities report the distribution of school books entirely through school book stores; thirty-five report the partial use of this method, mak-

ing a total of forty-four cities of the 319 entirely or partially using the school book store method of distributing school books.

Sixteen cities report that they use the rental system entirely. Twenty-four cities make a partial use of the rental system, making a total of forty cities using the rental system entirely or partially.

The following conclusions have been drawn:

1. The trend in distribution of textbooks from publishers to pupils since 1890 seems to be toward the free textbook method.

2. It is the consensus of a large percentage of the superintendents reporting, regardless of the method used in their school systems, that the method of free distribution is the best procedure. There is, however, a divided opinion regarding the institution that should furnish these books. Many believe the local board of education should furnish, or at least control the furnishing of textbooks, instead of the state.

3. The date of adoption of free

textbooks in states having this method seems to be unknown by many in the state.

4. A large percentage of the cities not having free textbooks use a combination of methods in which the free textbook method is used to distribute a large percentage of the books to the pupils.

5. The questionnaire revealed only one instance in which the free textbook method had been discarded by a state.

6. The free textbook method is not confined to a particular section of the country. States in the East, West, North and South are found to have free textbook laws. The Middle West and the Southeastern States appear to be sections of the country having fewer states and cities using the free textbook method.

7. The rental and school book store methods of distributing textbooks do not appear to be used as the sole methods of distributing textbooks in many cities. These methods are found to be auxiliary methods in cities using the local dealer plan.

"Man and the Motor Car"

Reviewed by WILLIAM McANDREW

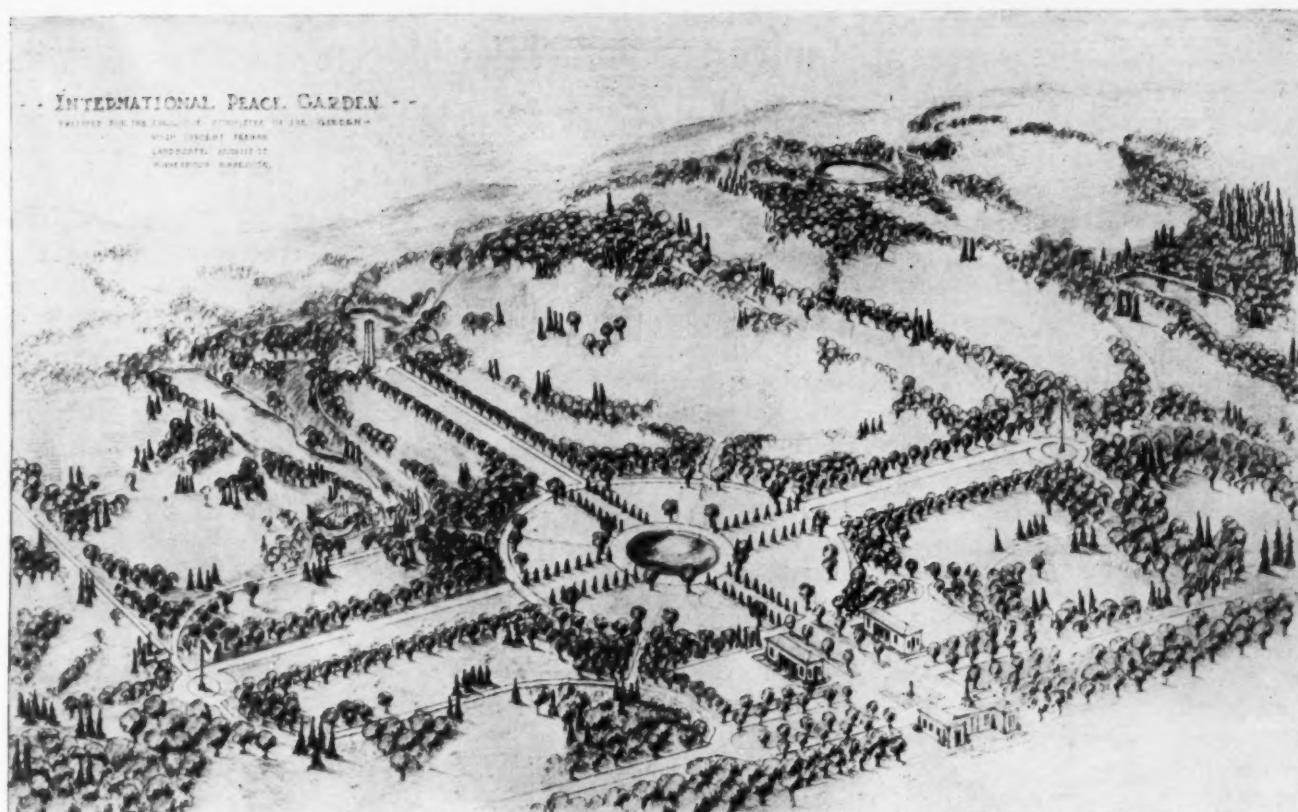
GATHERED from tested and perfected lessons in advanced schools and from the traffic suggestions of city and county experts, subjected to practical school men, rewritten and again submitted, approved by the president of the National Education Association, by an advisory board embracing public school teachers, university professors and automotive experts, offered at the bare cost of printing and binding, a notable textbook* for training in automobile driving comes to us for review.

Automobile instruction for every junior and senior high school pupil is coming. Detroit schools have gone

into it on an extensive scale. Indiana is requiring a stiff course in the matters constituting the present book. State College, Pennsylvania, holds, as its Professor Neyhart puts it, that the automobile menace will never be conquered until every person permitted to take a wheel has had a training as thorough as that of the airplane pilot. In his town the high school pupils are taken out, four at a time, and are shifted from observing to driving under expert instruction until each has had a total of eight hours at the wheel and twenty-four hours of concentrated observing. Up to date, out of the eighty-seven youngsters averaging 20,000 miles each, not one has had so much as a scratched fender.

This book is a tremendous force.

*Whitney, Albert W., Editor. National Bureau of Casualty and Surety Underwriters, 1 Park Avenue, New York. Pp. 256. \$1 postpaid; for 10 copies or more, 45 cents.



Turtle Mountain Schools

By ESTHER ABBETMEYER SELKE

TO COMMEMORATE the Rush-Bagot Agreement of 1814 that "there shall be no warship on the Great Lakes between Canada and the United States and the land boundary shall have neither fortress, soldier nor guns," Henry J. Moore of Canada conceived the idea of an International Peace Garden.

The Peace Garden idea met with immediate response on both sides of the border and the garden was located in the Turtle Mountains, between Boissevain, Manitoba, and Dunseith, N. D., at a point almost the geographic center of the North American continent. It covers an area of 2,200 acres of land donated equally by Manitoba and North Dakota and beautifully landscaped by the National Association of Gardeners. The two nations have marked

their pacific achievement by a monument and a fountain, equally spaced in each country.

The Turtle Mountains of North Dakota are the summer playgrounds for sections of the great plains. The mountains lie partly in North Dakota and partly in Manitoba. Hills rise to 2,600 feet in spots and cradle over 240 lakes. A beautiful, timbered lake-studded, game-laden region is this moorland. It is peopled by descendants of the Vikings and of native Americans, the Indians. Most of the inhabitants of the Turtle Mountains are Norwegians. Of the Indian residents, not many are full-blooded. Many are French-Canadians, descendants of voyageurs who fished and trapped and poled bateaux laden with pelts down the Missouri River to St. Louis. These In-



Sketches of the landscaping and the tower of the International Peace Garden, Turtle Mountains.

dians have also married into many other nationalities.

Amidst these lovely surroundings the children of Bottineau and Rolette Counties, which comprise the American sections of the Turtle Mountains, can learn well the lessons of peace, as well as other subjects. No schools could have a lovelier or more auspicious setting. No children could receive their schooling at a more

beautiful season or in a more idealistic setting. They are within walking distance of the proudest symbol for peace that the world has known.

In the Turtle Mountains the children reverse the usual procedure and go to school in summer and have their vacations in winter. They start to school in April and finish in November. At the end of July they are halfway through their term.

This unique practice is due to the problem of transportation of pupils and of fuel in winter. An eight-month school term is in operation in sixteen schools in Rolette County, eleven being within the confines of the mountains. Bottineau County has six schools with this spring-to-autumn term. As a rule, the counties directly west and south of Bottineau County have few of these "summer schools," while the counties north and east have a number of them.

Longer Term Is Sought

The Turtle Mountains also have a fine Indian school. Luba E. Roman describes this school well, saying, "It is the only one of its kind in the United States. The federal government has complete charge of the education of both whites and Indians in the two townships which comprise the reservation; the consolidated school at Belcourt accommodates about 500 children. They have another school in another corner of the township. There are modern busses that pick up the children, run on a regular schedule. The schools are not under the supervision of the county or state. The only funds given them is the revenue from county and state tuition. A great deal of handwork is offered."

The aim of educators in the Turtle Mountains is to do away with the schools during the summer and to offer bus transportation so that they, like the federally operated Indian schools, may function during the winter months and for a longer term than the present eight months. Then during the vacation children can hunt, fish and perchance meditate on the benefits of peace, so sublimely memorialized in their midst.

Stanford Summer Conference on Curriculum and Guidance

STANFORD UNIVERSITY will conduct a summer conference on curriculum and guidance, July 6 to 10, on the Stanford campus. Among the nationally known educational leaders who will participate in the conference are the following:

John W. Studebaker, U. S. Commissioner of Education; George S. Counts, Teachers College, Columbia University, and research director of the American Historical Association's commission on the social studies; H. L. Caswell, George Peabody College, and chief state curriculum consultant to Virginia, Alabama, Mississippi, Georgia, Florida and Arkansas; C. L. Cushman, director of curriculum and research of the Denver public schools; Worth McClure, superintendent of schools, Seattle; Peter Sandiford, psychologist from Toronto University; C. A. Howard, Vierling Kersey and H. E. Hendrix, state superintendents of education of Oregon, California and Arizona, respectively; Frederick Redefor, executive secretary of the Progressive Education Association; R. D. Russell, curriculum consultant to the state of Idaho, and Emmett Brown, professor of science education at Teachers College, Columbia University, and Lincoln School of Teachers College.

To Serve Many Groups

These and other visiting contributors will assist the staff of Stanford University and the talent available on the Pacific Coast.

This conference is planned to serve classroom teachers on all levels of the school system, curriculum workers, guidance workers, supervisors, administrators, research workers and the lay public.

The theme of the conference will be carried in six general evening sessions as follows: "The Practical Problems of Improving the Curriculum," H. L. Caswell; "The Social

Foundations of Curriculum and Guidance," George S. Counts; "The Psychological Foundations of Curriculum and Guidance," Reginald Bell; "The Community and Curriculum Reconstruction," John W. Studebaker; "Guidance in the Modern Educational Program," William M. Proctor and Harold C. Hand, and "Some Proposals for a Unified Educational Program," Paul R. Hanna.

Small Forums in Afternoon

In the afternoon the conference will be divided into sixteen smaller forum sessions. The themes include psychology, philosophy, and sociology foundations of curriculum and guidance; general curricular organization and administration; guidance in elementary and secondary schools; junior college and university guidance and personnel; social studies curriculum; mathematics and science curriculum; language arts curriculum; general arts curriculum; health and physical education curriculum; curriculums for atypical children; curriculums for special education—home arts, gifted children, trade and industry, commerce and agriculture; the curriculum of teacher education; adult education; national organizations contributing to curriculum and guidance; administrative and supervisory relations to curriculum, and modern measurement of curriculum outcomes.

The mornings will be reserved for informal discussion and recreation.

A stop-over at Palo Alto may be included in a round-trip rail ticket at little or no extra cost for those attending the summer meeting of the National Education Association at Portland, Ore. Details concerning the total program and the arrangements of the Stanford conference may be obtained by addressing an inquiry to Dean Grayson N. Kefauver of the school of education at Stanford.

Wrapping Red Tape in Cellophane

By MAHLON R. WEBB

MOST teachers are alert for new ways of shrinking the "red tape," of checking the checking systems and of minimizing what in recent years has seemed to be a pyramiding amount of pen and pencil gymnastics and clerical calisthenics. Especially is there need for short cuts owing to present conditions of overcrowded classrooms, heavy schedules and increased teaching loads. Certainly there is little argument against any device that helps to reduce clerical routine, saves time and in some degree at least contributes toward the release of human energies for the more significant business of better and more abundant teaching.

What teacher with forty-five to forty-eight pupils per class, five to six classes a day, plus homeroom responsibilities, has not at some time or another wished for an Aladdin's lamp that might magically signal out and record such things as significant differences in individual interests and abilities? How many individual aptitudes, interests and special abilities slip by every day as lost opportunities, neglected, forgotten and unchallenged largely because of the lack of time adequately to take cognizance of the straws in the wind? Such subtle fleeting evidences, rising above

the surface, are often indicative of strong sustaining forces below. These cues are often never caught and preserved for future use largely because of the press of circumstances and the hundred and one things that are usually clamoring for attention at the moment.

One such device that is proving effective, especially in facilitating rapid fire recording of significant items, is the transparent packet-folder appearing in the illustration.

The packet-folder accommodates class seating plans, assignments, charts and materials that involve much handling. Coupled with the assurance that neat clean records are visible at a moment's notice, no matter how much or how roughly they

may be handled, lies the other advantage that notations, grades, marks, special abilities and pertinent information may be jotted down on the outside of the transparent folder.

If a seating plan such as the one appearing here is being used, notations may be made directly above any pupil's name or seating position simply by using a cellophane marking pencil, without any danger of defacing or otherwise spoiling the original plans enclosed within the folder. Cellophane marking pencils may be obtained at any stationery supply store. Thus, no time is unnecessarily lost during the class period in writing down the pupil's name, grade or section, class number or period. This information is clearly visible and

SEATING PLAN							
Year 9B	Class	Section	Hour	60	M. R. Webb	Teacher	
Check Notebooks -							
John White 9B-8	John Widmar 9B-8	William Shivers 9B-11	Bud Rankin 9B-8	Albert Miller 9B-8	Robert McWaters 9B-8	Frank Mansfield 9B-8	George Leese 9B-11
33B	23A	22B	22A	21B	21A	20B	20A
Jack Krohmer 9B-8	Billy Knight 9B-10	William Kinney 9B-8	Joyce 9B-8	Robert Hein 9B-8	William Hamilton 9B-8	Earle Fleisher 9B-8	Edmond Farrell 9B-8
19	18	17	16	15	14	13	12
Manuel Citron 9B-8	Stanley Cavdek 9B-8	Bob Callahan 9B-8	Bob Brown 9B-11	John Beech 9B-8	William Boomer 9B-8	Ralph Beaumont 9B-8	Bob August 9B-8
8	7	6	5	4	3	2	1
John Cannavine 9B-8	Richard D. 9B-8	Herman Fabert 9B-11	Betty Ziehm 9B-11	Hilda Wallman 9B-8	Helen Waller 9B-8	Doris A. Tenere 9B-8	Kleener Peje 9B-8
9	10	11	40B	40A	39B	39A	38B
Katherine Martindale 9B-8	Kathryn MacRitchie 9B-8	Margaret Lewis 9B-8	Rose Koss 9B-8	Josephine Kossnerl 9B-8	Rosemary Kapleski 9B-8	Kleener Kister 9B-8	Mary Kossner 9B-8
38A	37B	37A	36B	36A	35	34	33
Anna Kastelic 9B-8	Stella Huber 9B-8	Betty Haynes 9B-8	Marian Hanna 9B-11	Francis Griffith 9B-8	Jean Grant 9B-7	Betty Brandenburg 9B-8	Kleener Babets 9B-8
22	21	20	29	28	27	26	25

The teacher's packet-folder as it appears when in daily use.

ready for instant use, while permanently preserved beneath the cover of the transparent folder. The cellophane pencilings and notations are easily and quickly erased with a small dry cloth at any time convenient to the instructor.

The use of the folder may be more readily understood by a glance at the illustration. The seating plan is enclosed within the transparent folder. Before the class period opened, the notation "check notebooks" was jotted down on the outside of the folder to serve as a reminder. Several pupils the day before had failed to hand in their notebooks for final checking on certain experiments. Penciled dots were placed above the names of the pupils whose notebooks were to be checked. These were subsequently converted to satisfactory check marks during the class period at the time the notebooks were inspected and approved. Later in the day, pupil assistants erased these check marks after transferring them to the class record book.

Attention is called to the fact that two pupils were checked as absent on this day, as evidenced by the two cross marks above their names and seating positions. Conspicuous marks, such as these, on the top of the folder draw attention on the following day or days if absence is continued.

In large classes considerable time may be saved during the class period in noting absences and checking attendance. At the end of the school day, absences, tardiness and information of a relevant nature, jotted down on the top of the folder, may then be used to check with the records maintained separately by the class secretaries.

It is evident by a glance that three pupils made special grades worthy of attention. Two boys made grades of G, and one girl made an E during this class period. These grades were thus recorded, without danger of being forgotten, in no more time than it takes to execute the stroke of a pencil.

Three special reports on the lives of Galileo, Priestley and Torricelli

were assigned during the class period to pupils who volunteered to do individual study on the lives of these men. These assignments were simply jotted down above the names of the pupils, without the loss of time necessitated in running down the class numbers or names of the pupils in the record book, or without the added work of recording the names of the pupils and the title of their reports on special assignment sheets.

The transparent folder also serves as a convenient packet for paper inserts, official notices, reminders, and announcements. These may be brought to attention at the proper time without the necessity, in many cases, even of removing them.

Any teacher or pupil assistant can make three or four of these transparent folders in any size desirable in little more time than it takes to tell about it, and at a total expenditure of less than a dollar. A large sheet

of celluloid of one-ten-thousandths inch thickness may be obtained at any automobile supply house or large department store at which automobile accessories are handled. Celluloid sheeting thicker than a ten-thousandths-inch will be too heavy for proper folding. The use of light weight celluloid will result in a neater folder and one which will lie flat without danger of bulging or wrinkling.

Any folder of appropriate size may be used, ruling the celluloid with the cellophane pencil, cutting it out with a pair of scissors or paper cutter, folding it at the bottom in such a way that front and back are even, and then stapling the sides and bottom with a desk stapler or fastener. Three or four staples on each side and along the bottom will prove satisfactory.

One folder serves the needs of two classes since there is transparent paper on both sides.

Guidance in a Study Hall

THE school that is without a guidance program because it cannot afford the services of a properly trained counselor should study the possibilities of guidance offered through the use of the study hall, where every pupil enrolled in the school spends at least one period each day, maintains Charlotte Kern, writing in *Occupations*.

The program successfully attempted at Bremerton High School, Bremerton, Wash., explains Miss Kern, consists of two divisions: daily suggestions written on the blackboard and individual conferences.

The study hall at Bremerton is in the auditorium, so a portable blackboard is used for the suggestions on proper conduct, good study habits, desirable personality traits, or on planning a well balanced course of study. The suggestions are written out in colored chalk to attract the pupils' eyes.

Occasional contests are used to keep the pupils interested. A "Know Your School" campaign, based on questions relative to school enrollment, student government and school activities, was sponsored on the basis that pupils interested in their school will later be citizens interested in their communities.

Individual conferences supplement the blackboard suggestions so that pupils who are not sufficiently resourceful to apply the hints may be assisted in developing efficient methods of work and in finding suitable activities for service to the school. Vocational guidance is also given.

In cooperation with the school, the Kiwanis organization has arranged to give a limited number of pupils experience in their chosen line of work by permitting them to serve as apprentices, without pay, not more than three hours a week during the school term, in the offices of business firms.

One High School's Set-Up for Improving Instruction

By I. H. LINDER

THE Sacramento Senior High School presents all the problems of instruction to be found in any large school composed of 3,600 pupils and 140 instructors. Its departments include those growing out of tradition and those introduced in the high school in the last twenty-five years. Some have direct contact with modern life; others are quite largely removed from any public concern.

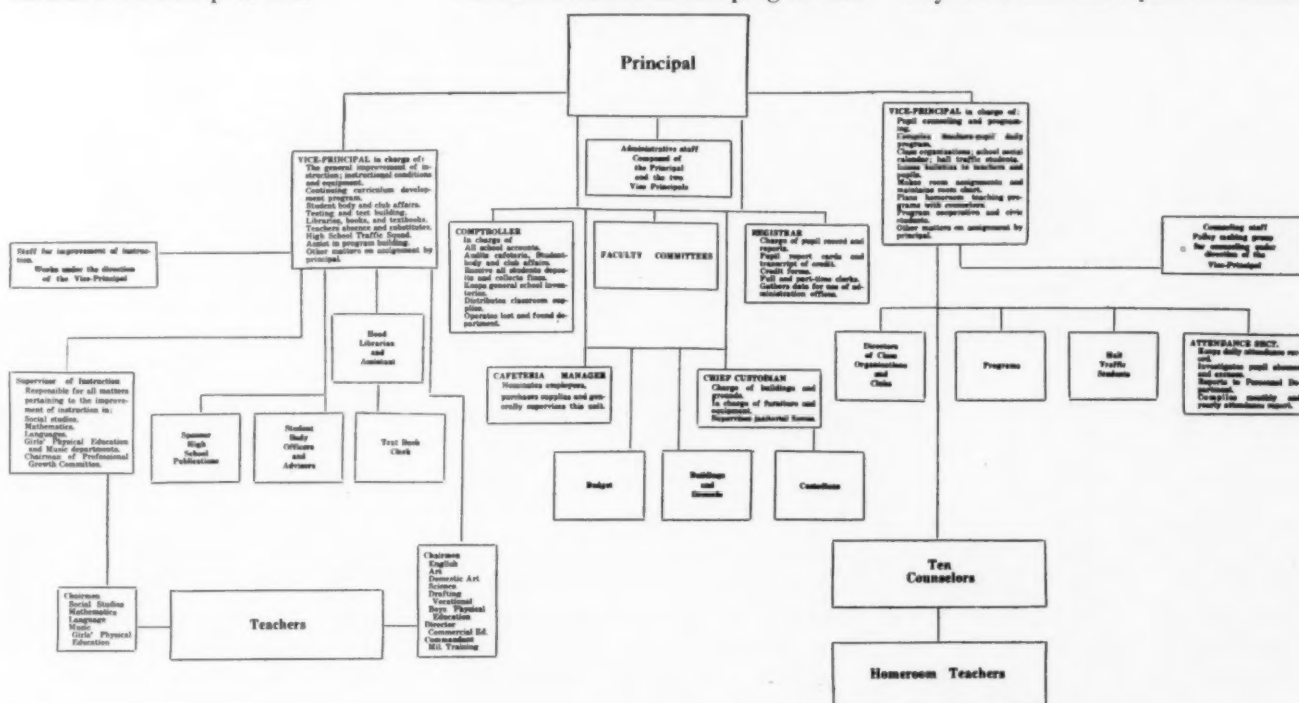
All departments have made an effort to relate their courses to the obvious needs of the present generation. Some have had to sacrifice their former logical arrangement to satisfy the diverse present day requirements. Others have been stimulated to reorganization of courses which have a natural relationship to life.

The senior high school, along with other units of the Sacramento city schools, engaged in a general revision of curriculum during 1929-1930. This revision was carried out under the direction of J. R. Overturf, deputy superintendent of schools. The new curriculums have been considerably modified since their introduction. Their development has been progressive and has given a great impetus to improvement of instruction. The progress has, however, revealed other problems of instruction and placed the whole faculty in an attitude conducive to accelerated development.

No small portion of such success as has been attained in this program has

been due to its organization. Revisions of courses have been in the hands of committees of teachers involving an unusually large percentage of the teachers. Moreover, provision has been constantly made for critical appraisal of the results by the entire faculty. A considerable degree of faculty awakening has resulted.

We have tried to keep in mind that instructional improvement would result more from the proper process of group planning than from the excellence of the immediate plan. Furthermore, teachers, like any other group, carry out plans more intelligently and more wholeheartedly when they have had some part in forming



The organization chart of Sacramento High School. Department chairmen are responsible for the preliminary program, differentiation of pupils, preliminary department budget, department inventory and requisitions, texts, assistance with testing program, curriculum revision and general instructional improvement.

them. In short, making as well as carrying out plans is the best type of teacher-training on the job.

Any plan of instruction must start with the resources at hand, and an intelligent approach demands complete recognition of human shortcomings as well as of human abilities.

The set-up for improvement of instruction in the Sacramento Senior High School is built upon the belief that this function is a major problem of the modern secondary school. A vice principal in charge of instruction serves as the principal's representative in this work and has charge of the program, assisted by a supervisor of instruction and the thirteen department chairmen, who constitute a staff for the improvement of instruction. The diagram on the preceding page will indicate the relationships of individual positions to this group.

With the help of this staff and with the approval of the principal, all plans for improvement in general instruction are put in progress.

In the more specialized problems not of immediate concern to the other department chairmen, each individual chairman deals with the vice principal and the supervisor of instruction.

Chairmen Write Term Reports

To make possible the fullest cooperation of the principal's office and the chairman of the individual department, each chairman is asked to write a term report each semester. This form, a four-page folder, is submitted after preliminary conference at the opening of the term, setting up term objectives and a calendar.

The term objectives include administrative and supervisory objectives; curriculum plans, and tests and curriculum test revisions.

The department chairman's calendar lists meetings, test dates and miscellaneous administrative functions of the chairman. Part of these, being uniform for all department chairmen, are printed on the form as information. Other items are filled in by the chairman.

At the end of the term and on another page of the folder, the chair-

man reports the progress made in terms of the objectives.

One copy of the form as submitted is kept by the chairman, one goes to the principal and one to the vice principal.

Committees are appointed from time to time covering specific problems. The personnel of these committees is usually representative of many departments. At present there are active committees of three and advisory committees of seven on both the radio and the movie.

Some Active Committees

The movie committee has been asked the questions, How can the school make instructional use of the movie-going tendency of young people? How can it control the problem of selection? How can it avoid the impression as well as the conflicts of advertising? Should it provide a form on which children can be given school recognition for the critical appraisal of worth while movies, similar to that given for the reading of a book? Corresponding questions are asked the radio committee.

Reports of these committees will go to the appropriate departments when completed. Other committees at present at work have to do with safety, traffic safety, consumer education, remedial reading and teachers' marks.

The safety committee is to list instructional hazards throughout the school and make recommendations concerning them.

The traffic safety committee is to control the traffic squad in its work on busy street corners adjoining the school before and after school and during lunch hours. This committee also has developed a system of registering and regulating the parking of pupils' cars.

Consumer education committees are making an effort to adapt our courses to a nation of consumers rather than a nation of producers, believing that education should be more directly concerned with consumption than with production.

A remedial reading committee is

now working on the problem of defective reading abilities. Many high school pupils need remedial instruction because of poor habits of reading developed in the lower schools. They are such slow readers that they comprehend what they read only vaguely. Some of them are word readers, stressing all words in a sentence equally and, of course, distorting if not losing the meaning.

The teaching of reading, itself a difficult task, becomes doubly so when old habits must be broken and larger units of meaning emphasized at the same time. The task calls for teacher-training in difficult techniques and exacting standards of measurement. The committee is at work on the problem from the practical aspects of thorough diagnosis of individual deficiencies and the application of remedial exercises.

Simplifying Teachers' Marks

A committee on the study of teachers' marks has been busy for a year on the problem of simplifying teachers' marks. The plan is to achieve a basis for marks reflecting more accurately the work done by the pupil and at the same time having more meaning to him and his parent. The marking system has introduced an artificiality into the work-credit plan of education. If marks are ever to be abolished, a substitute will have to meet the two-fold test of rewarding achievement in the classroom and standing for such accomplishment on the records.

General curriculum committees, now at work, recognize the fact that the modern secondary school is putting new wine in old bottles. Not being free always to change titles and captions of courses, teachers must be freer to select, evaluate and even to import phases of subject matter demanded by modern life.

A good instance of this is a committee at work on a nontechnical course in chemistry. This course in general chemistry is much simpler than the regular course and makes more use of the applications. The foundations of this course are being

laid in the everyday chemistry of the household and industry.

Certain phases of the problem of adapting pupils to their complete environment may make necessary the arbitrary assignment to certain courses of subject matter not logically a part of the field. If there is no logical place for the necessary units of instruction on safety, it may be imperative to assign them as a master unit in such courses as will bring them to all pupils.

Other units of general education for which the secondary school must provide are those connected with institutional orientation. These units include group counseling and preparation of the pupil to take every possible advantage of course offerings and other privileges of the school.

Another phase of general education being developed includes everyday health instruction, those nontechnical phases of health not requiring scientific study.

Social orientation calls for another group of units, including social etiquette, social dancing and problems of conduct informally discussed and largely initiated by the pupils.

Reviews of Current Literature

Among the most useful agencies for improving the work of the secondary school are the means used to keep faculty members advised of important developments in the field. Literature dealing with these developments should circulate freely among faculty members, requiring no effort on their part at least to examine it. Our procedure for accomplishing this serves its purpose with a minimum of professional and clerical supervision.

Teachers are encouraged to review selections in the current literature in one of three forms: (1) a mere appraisal with advice regarding the desirability of reading; (2) a digest of the article as a substitute for reading the original, or (3) a sampling of the content with an urgent appeal to read the selection reviewed.

These reviews are reproduced as one-page manuscript units, suitable for filing, in numbers sufficient either

to serve the whole faculty or only those individuals most likely to be concerned.

Each review features the name of the faculty member writing it; this adds a personal touch and encourages others to similar efforts. The policy is to use a minimum of restriction so as to retain the confidence of the group that the method is free from administrative censorship.

Books, research pamphlets, professional magazines and bibliographies

are similarly processed. The procedure is somewhat simplified. A schedule of names and dates is attached to the book or pamphlet with the instruction to pass it on to the next name on the list not later than a specified date. The last person is instructed to return it to the office. At the time the selection is sent out, a copy of the schedule goes to each person on the list and another copy of it is filed. This prevents the material from becoming sidetracked.

Adult Education in an Iowa County

By LLEWELLYN F. JONES

THE adult education program was inaugurated as an emergency measure to help relieve unemployment. But in some counties, such as Sioux County, Iowa, where it has been accepted and developed for its many good qualities, instead of as a dignified dole, the program has been so practical and beneficial that many have suggested that it be made permanent.

Under the present system the program is, of course, hampered by its limitations as a relief measure, but, owing to the efforts of the county superintendent, through whose office the plan is supervised, the splendid spirit of cooperation of its teachers and the response of the people, adult education in Sioux County ranks high in the state for attendance, efficient application and other qualifications that tend to make the movement a success in the community.

At present classes are being held in Rock Valley, Sioux Center, Hawarden, Ireton, Hull and Orange City. In these six towns eight teachers are conducting classes in citizenship, English and grammar, history, music, dramatics, home economics and bookkeeping, with a total of some 400 persons enrolled.

In Sioux County are many uneducated residents, some of whom cannot read or write. It is they who

need an education in citizenship and government.

Commercial courses are still in their infancy in the Sioux County program, but other subjects of a commercial nature will soon be added to the bookkeeping.

Instruction in music is provided with three objectives: to develop talent commercially, to contribute to happier home environment, and to enable citizens to express their inward feelings, thus relieving emotions that might easily be diverted into channels that are harmful.

Home economics classes give instruction in the art of converting garments that would otherwise be discarded into presentable, serviceable apparel. The savings derived from instruction of this kind will pay many times over the taxes necessary to support an adult education program.

May I offer as a comparison of value received the fact that the cost of a stretch of pavement one mile long would support an elaborate adult education program in our county for a period of at least two years and would employ ten or twelve competent teachers who could instruct an average of 100 persons a week. The classes would better fit the unemployed to the employment at hand and would help to qualify the unemployed for paying positions.

Happy to Say

By WILLIAM McANDREW

IT IS not altogether easy to appreciate the reason why any principal desires to see an oil portrait of himself hanging in his school. Such a person, even when a good portion of the cost comes from his own pocket, likes to say that his friends insisted on giving the memorial. It seems to me a schoolmaster can paint his own portrait day by day. Every time he is especially gracious or considerate; also, whenever he is snippy and small, he is making his picture. People carry away and preserve it. For fifty-four years I have had in the private gallery of my mind the likeness of my Ypsilanti teacher and principal, George Carman, later of Lewis Institute, Chicago. A label appertaining to it would read, "Portrait of a Gentleman."

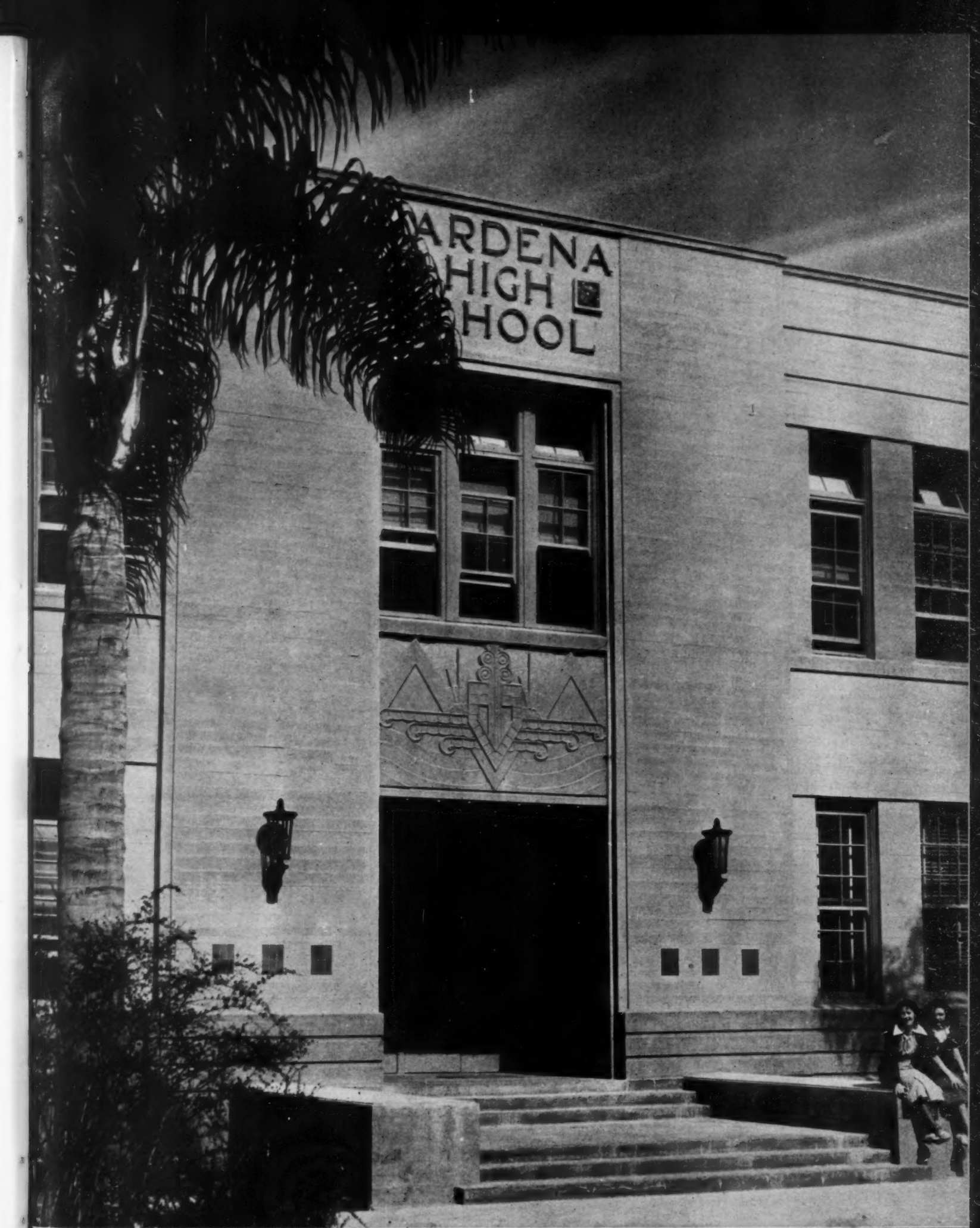
JOSEPH BACHE, a district superintendent of the Chicago school system, had a suspicion that a recognition of anything done well by him stirred up an ambition to do better. He thought it worth trying on others. At the end of his first year in the district he wrote a personal letter to each teacher whose attendance had been perfect or whose teaching was recorded as superior. There were twenty-seven; next year, fifty-nine; then, one hundred fifty-six. Now come a number of psychologists backed by statistical experiments who claim that the compound interest resulting from investments like Bache's is derivable whenever the boss uses this kind of positive rather than negative supervision. Bache is a jolly superintendent, but he is no "jollier." He sets high and hard standards. He gets them realized. Then he praises to beat the band.

PRAISE by a man who doesn't know what he is talking about isn't worth the conversation of a parrot. Napoleon III, the Little, told his army it was the finest in the world. It collapsed when the war came. Praise, by one who knows, is food, drink and tonic, for the praisee. Its essence of strength is its statement of why.

ONCE in a rare moment of confidence Wright showed me his "Courtesy Book," a journal of names and of gracious acts to be remembered. When I saw that Mrs. Wright appeared in it every day, I rejoiced that there are at least two Wrights in this forgetful world.

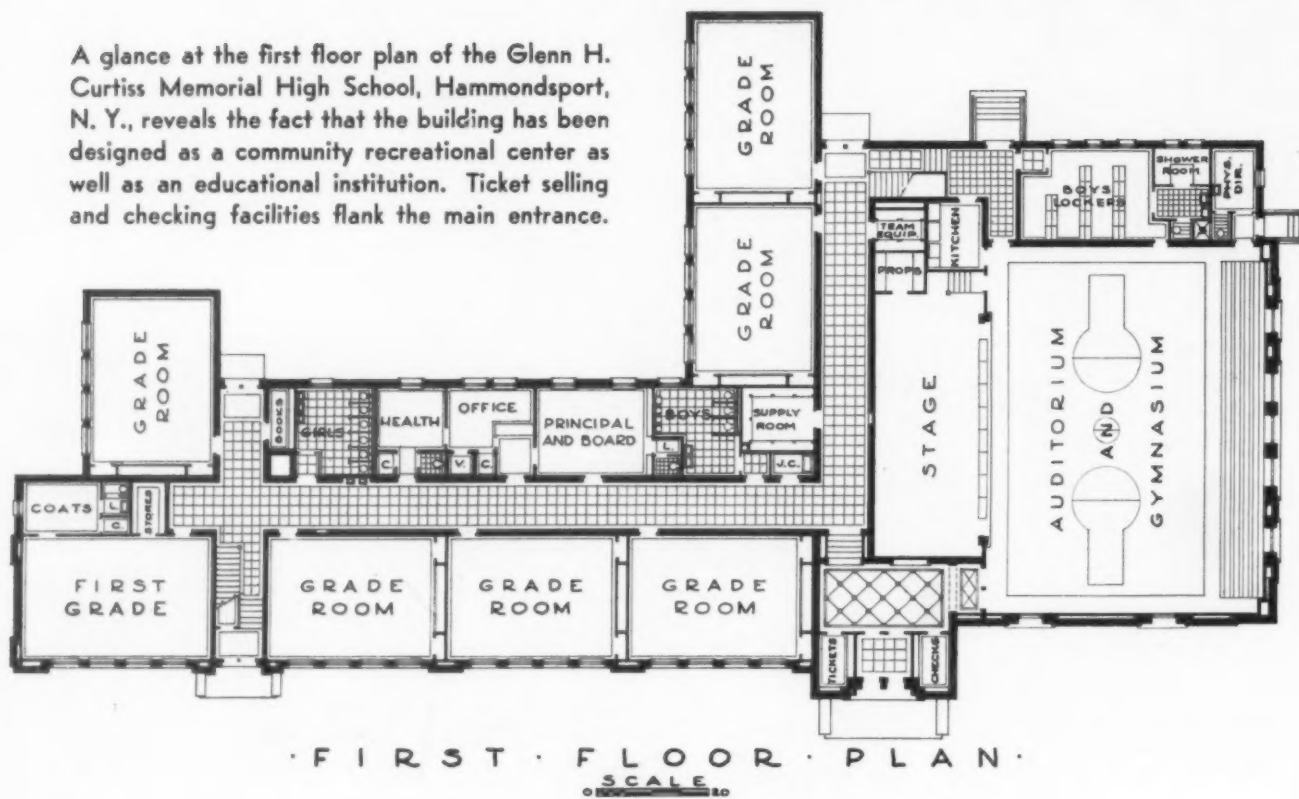
THERE has been a good deal of unprofitable obloquy thrown on Stephen Decatur's famous toast, "My country, right or wrong." But this *IS* our country, isn't it? We have to assume that all who are living in it either want to or have to. Those who can't get to live anywhere else are a great deal better off if they say they prefer to live where they must. That's good old Epictetian doctrine. But saying, "My country, right or wrong" while it means "I love it in any case," doesn't mean "I love wrong" and never did mean that. I love my mother none the less because of her rheumatism. If I love her enough I'll work to get her rid of it.

WHEN, it may be at a most unexpected time and place, the conviction flashes on you that your work has in it the certainty of a satisfying life-career, you may properly mark and celebrate that occasion as a birthday. You may well consecrate its anniversaries.

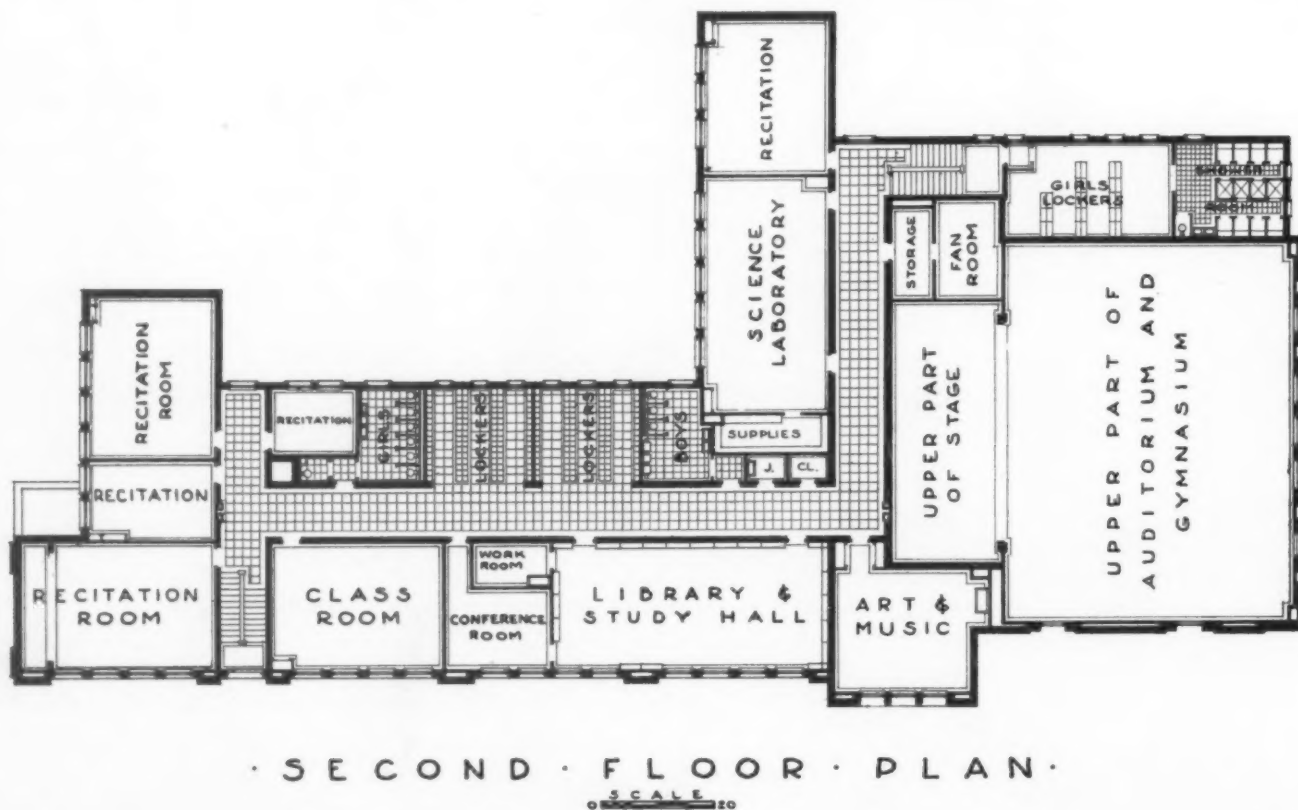


THE SCHOOL PLANT

A glance at the first floor plan of the Glenn H. Curtiss Memorial High School, Hammondsport, N. Y., reveals the fact that the building has been designed as a community recreational center as well as an educational institution. Ticket selling and checking facilities flank the main entrance.



On the second floor are the science laboratory, library and study hall, conference room, special English and public speaking room, art and music room and other classrooms. Alcoves provide space for individual lockers for each pupil in the school. Storage and supply space are adequately provided.





A School Dedicated to Modern Pioneering

By PAUL W. SEAGERS and ROBERT R. GRAHAM

ON A hillside above Hammondsport, N. Y., overlooking Keuka Lake, stands a memorial high school to that great American, Glenn H. Curtiss. Dedicated to a modern pioneer, the building incorporates in its design the most modern and advanced structural, mechanical and educational principles.

Glenn Curtiss, known the world over as the first aviator to fly a scheduled flight, originally built his aeroplanes in a small factory, adjacent to his home, on a hill overlooking the village of Hammondsport, Lake Keuka and Pleasant Valley. On this site now stands an imposing edifice, mute testimony of the esteem in which the late inventor was held by

the townspeople of Hammondsport.

The building, not large in comparison with many of the huge structures springing up in the field of education, is nevertheless far ahead of many contemporary schools in adherence to advanced educational principles. Architecturally it is simple, direct and imposing, designed in a reserved modern style and in harmony with its surroundings.

The main entrance leads into a rich, quiet lobby, with a vaulted ceiling and tile wainscoting. At the left is a terra cotta drinking fountain beautifully ornamented by two figures standing under the tree of life. Directly ahead is an array of athletic trophies attractively displayed in a built-in case. Ample checking facil-

ities are provided in this lobby, for the building also serves as a community recreational center for all residents of the school district.

On the right is a combined auditorium and gymnasium. Completely surrounding the large room is a high wainscot of cork, which serves a double purpose. It gives a note of richness to the decorations of the auditorium and at the same time prevents serious injuries when fast moving players come in violent contact with the walls. The ceiling lights are recessed to the surface of sound-absorbing plaster; this, together with the cork wainscot, effectively prevents any reverberation or distortion of sound.

Accommodations for spectators are



Each classroom is equipped to permit installation of television and talking pictures. Each has a radio antenna, ground outlet, telephone, stereopticon outlet and two "electric eyes" to control the intensity of the lighting at desk level. Below may be seen the science room clock, which gives notice of the time that has elapsed in experiments.



supplied by balanced folding bleachers, providing seats for approximately 300 persons. Continuity in design is ensured by the fact that the base of these bleachers is also faced with cork, rendering them practically invisible when swung up against the wall. Additional seating for auditorium use is provided by several hundred folding steel chairs, neatly stored on carriers beneath the stage.

Novel Athletic Clock

On the wall hangs another innovation, designed especially for this building, a physical education and athletic clock. Similar to the usual electric stop clock, this unit, controlled from the score-keeper's table, marks the time of play, deducts the time when play is called out and signals the end of each period with an imperious gong. In gymnasium classes the director may set up group exercises that change at the sound of this gong.

The stage is equipped electrically and scenically with the most modern theatrical devices, from its disappearing footlights, borders and multiple-bank dimmers to velours and damask curtains, hand-dyed counterbalanced cyclorama, tastefully painted wood-drop and microphone outlets.

From the auditorium one walks through quiet, wainscoted corridors, all acoustically treated to prevent echoes, to the various parts of the building. Every room is equipped with loud-speakers through which, at the discretion of the central office, recorded or broadcast educational programs or intimate addresses to the pupils from various local officials or visiting celebrities, may be heard. There is remote control of all radio and public address outlets in the building by means of a switchboard directly behind the principal's desk. The operation of the public address system may be reversed so that the principal at his desk can, merely by pressing a button, listen in on any recitation in the building.

The kindergarten department is a complete unit, entirely independent

of the remainder of the school. Here the children play upon sanitary linoleum, brightly inlaid with the forms of their favorite games. Here, too, they learn the rudiments of discipline and orderliness, each with his own individual desk and chair. The kindergarten coat room and toilet, adjacent to the classroom, make it unnecessary for the little ones to travel the corridors used by the older pupils.

Upon entering the classrooms, an unusual sight meets the eye. A rubber tile wainscoting has been installed below all blackboards. Thus, the unsightly scuffed wall so common in classrooms is permanently prevented. In addition to the usual radio outlet, each room is equipped to permit installation of television and talking movie equipment. Each room has a radio antenna and ground outlet, as well as a telephone, stereopticon outlet and other necessary electrical outlets. Grade rooms are equipped with wardrobes at the rear of the room.

Protecting Pupils' Vision

Of late years, this country has become acutely conscious of the tragedy of defective vision. Few schools are well equipped to combat this evil. All classroom lights throughout the building are controlled, in addition to the usual switches, by photo-electric cell switches, operating in conjunction with foot candle meters. Whenever the intensity of illumination at desk level falls below that necessary for easy vision, the "electric eye" turns on the lights. There are two electric eyes controlling light from east and west. So sensitive are these devices that a passing cloud or the shadow of a hand waved in front of the "eye" is sufficient to turn on the lights. Monitor lights in the principal's office indicate when lights are burning and where.

In the laboratory, one finds a counterpart of the basketball clock, this one so designed as to give notice of the elapsed time in the experiments conducted in the science classes. Cases and cabinets, such as storage, notebook, fume hood, flask cabinets



A complete electrical home has been established in the departments of homemaking and food service. These are housed in the inventor's old home. Here, too, are served nutritious and inexpensive lunches to those pupils who cannot go home at noon. Little remodeling was done upon the Glenn Curtiss house.



and stopper and glass tubing cabinets, are unique in design and make for efficiency.

Throughout the building unusual attention has been given to the location of service rooms, book storage rooms and closets for the storage of all equipment.

Boys' locker rooms, showers and

the office of the athletic director are located adjacent to the gymnasium on the first floor. The girls' locker rooms and showers are located directly over the boys' and are reached by stairs from the second floor corridors.

Many noticeable features exist throughout the building. The English and public speaking room, on the

second floor, has a small stage with a curtain, microphone outlet, loud-speaker and special lighting. The art-music room has special closets for storage of art materials and sheet music. It is also equipped with a complete talking movie outfit as well as an individual radio set, electric phonograph and piano. The library on the second floor is paneled in oak and furnished with tables and chairs of colonial design.

The main administrative group, composed of principal's office, secretary's office and health center, is suitably located in the center of the first floor, easily accessible to pupils and others having business to transact with the school. The principal's office, which is also used as a board room, is completely and attractively furnished with red leather chairs, an electrical desk, floor lamps and other furnishings, which blend with the beautiful rubber tile floor, built-in book cases and indirect lighting fixtures. The secretary's office is equipped with a walnut finish counter with storage cabinets and filing equipment beneath. With the exception of the public address and radio system, this office is the "nerve center" of the entire building, containing the telephone switchboard, master clock and fire alarm system. In the vault are found steel shelves, files and safety deposit boxes all built in to form one complete unit.

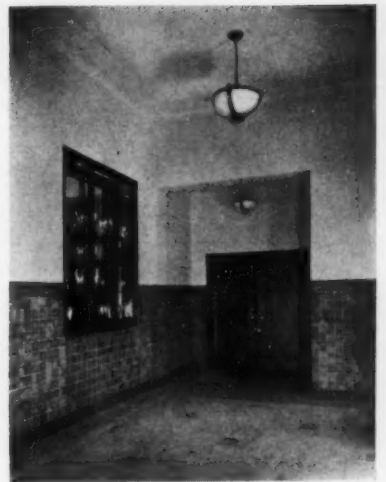
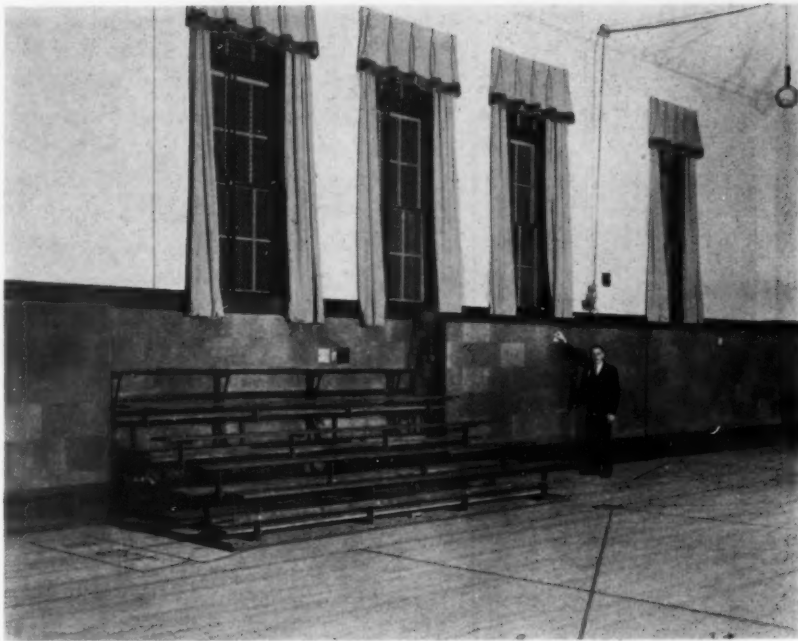
Recognizing the usual neglect in the care of children's teeth, there has been installed in the health center a complete dental assembly, the product of the foremost manufacturer of dental equipment in the country. The assembly consists of chair, dental unit, operating light, sterilizer and instrument cabinet, finished in ivory enamel and trimmed with chromium. Here a competent dentist cleans the teeth of all children registered in the school, makes periodic examinations and forwards reports to the parents regarding necessary attention. First-aid equipment and supplies, an electric eye chart, scales and the medical and health equipment are provided.

All equipment throughout the



The library, paneled in oak, is furnished with tables and chairs of colonial design. In the English and public speaking room is a small stage with curtain, special lighting and loud-speaker.





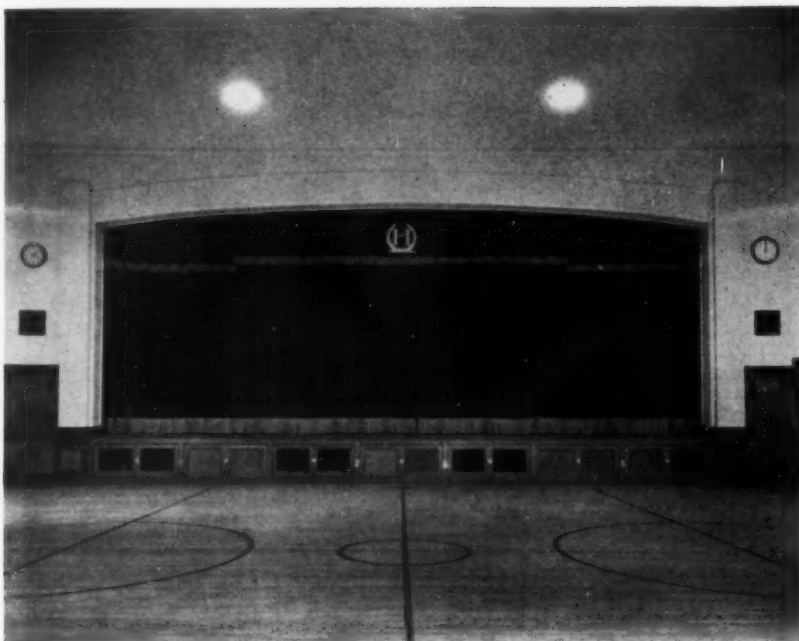
Lobby, with vaulted ceiling and tile wainscoting, has trophy case and ornamented terra cotta drinking fountain.



A high wainscot of cork surrounds the large auditorium-gymnasium. The base of the folding bleachers is also of cork, ensuring continuity in wall design. Remote control of all radio and public address outlets in the building is provided by means of a switchboard behind the desk of Paul W. Seagers, principal.

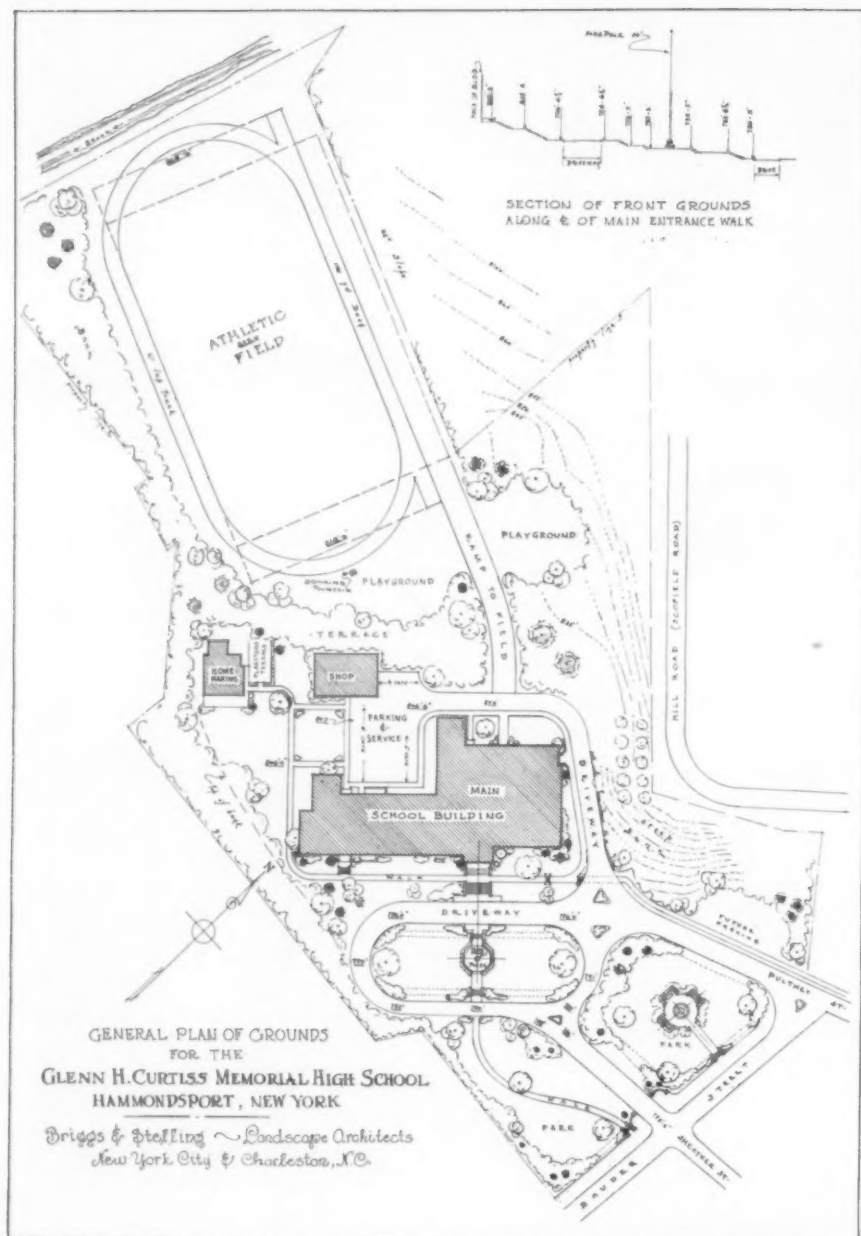


The health center is equipped in the modern manner. Below is a view of the dental unit.



Landscaping Frames the Picture

By A. CARL STELLING



The school grounds are on various levels, as the general plan shows.

building was carefully studied to meet the requirements of the curriculum. Some of the equipment is standard and of the best quality obtainable while in many cases it was designed especially for this project.

Alcoves on the second floor provide space for individual lockers for each pupil in the high school. Each locker space provides two sections for each pupil, one for hat and books, one for coats and wraps.

A short distance south of the school stands the former home of Glenn Curtiss. This building now houses the departments of homemaking and

food service. The inventor's home has been remodeled only when necessary to comply with modern practices of domestic science. The engineers of one of the large electrical companies have aided in making this a complete electrical home. Here also are served nutritious, inexpensive lunches to those pupils who live too far away from school to return home at noon.

Surely no more appropriate memorial to Glenn Curtiss could have been devised than to provide the means of furthering health and education in his beloved Hammondsport.

IN ORDER to convey a clear picture of the proposed landscape development of the Glenn H. Curtiss Memorial High School, it is necessary to study its location and surroundings. The property is centrally situated in the school district away from all such hazards as possible floods and railroad or important traffic arteries, yet it is most accessible. One has to be familiar with the scenic beauty of Hammondsport and its environs to get a clear concept of the extremely steep topography of the land.

The school site occupies one of the choicest of the many hills overlooking Lake Keuka. These hills on both sides of Hammondsport are unique in that they are terraced from top to bottom as are the hills in the wine country of France. Hammondsport was settled many years ago by pioneers who introduced this type of cultivation from their native land.

To be able to complete the requirements for a well planned development of school grounds, it became necessary to cut into the side of the mountain from the very entrance to the end of the athletic field. This meant that thousands of cubic yards of earth must be excavated and filled to create level planes. A topographic and boundary survey map was most essential to accomplish this purpose. The numerous levels thus created presented a difficult drainage problem.

The building is situated in the center of a hill sloping in two directions. To ensure proper drainage, walls, terraces, ramps, embankments and steps had to be built and graded, thus serving to concentrate the water at designated points and to accommodate any freshet that may occur during various seasons.

The general plan shows what development facilities were made possible as a result of the foregoing feats of landscape design and engineering. Approaching the new school from the town, the plans show Sheather Street to be the principal thoroughfare. Circumstances did not permit a continuous axis from Sheather Street to the main entrance of the building so a turning point was established at a convenient level. This point was emphasized by a flagpole.

It is desirable to segregate walks from drives as much as possible. Fortunately sufficient space permitted the introduction of a gracefully curved walk in the same direction as the drive continuing from Sheather Street to the next level. At this point the road branches in both directions forming a circular drive in front of the building with the walk crossing the drive to the flagpole. The walk forms a plaza around the flagpole and

continues from there across the drive again to a higher level, where it leads to the main entrance.

Many of the pupils use Pultney Street, which is on a somewhat higher level than Sheather Street, and which affords a more direct approach to both the front, side and rear entrances of the building as well as to the homemaking building, shop and boiler room. This necessitated the consideration of an additional drive and walk extending from that street. In many respects this secondary drive may be considered the main approach to the parking area and athletic field. With the two approaches so situated, complete circulation is accomplished.

The athletic field is on a still higher level. A ramp conveniently connects it with the gymnasium. The track fulfills the standard requirements for running the mile in six laps. To permit as wide a batting range as possible for baseball, part of the track area is necessary. The wooden curbing on both sides of the track has therefore been planned to allow a minimum projection above the ground, thus preventing possible injury through tripping. A standard sized football field just fits within the track. Play areas for small children have been provided at various places.

To enhance their architectural features, well designed modern school buildings such as the Glenn H. Curtiss Memorial High require well studied planting arrangements, preferably simple. This can be accomplished by the use of groups of native and indigenous plant material.

New Light on Marble

The beauties of marble are revealed in a new light, or rather through the use of light, following a three-year research project carried on by the Vermont Marble Company at the Mellon Institute of Industrial Research of Pittsburgh, in conjunction with Prof. George W. Bain of Amherst College.

Lumar, as it is known, possesses color and luminous qualities resulting from scientific selection and processing of the natural stone. When illuminated it transmits light in varying degrees of intensity at the same time disclosing a wide variety of colors and markings never before revealed. In fact, it achieves, for the first time, according to the Mellon Institute, the real benefits of its third dimension. Length and breadth are its familiar properties, but there has been little opportunity for becoming acquainted with its characteristics of color, luminosity and varied markings.

At a recent demonstration of the new marble in New York City, six different varieties were on view, showing how the intensity of light diffusion varies from a dull, warm glow in one type to a brilliant radiance in another. This intensified light transmitting power, it was explained, coupled with the heightening of sub-surface color and design, opens a new field of lighting and decorative purposes for marble, from lighting fixtures to whole luminous walls and from paneled objects of small size to the entire front of a business or public building.

Lumar is not a "doped" stone, the company emphasizes, but one scientifically processed to secure a high degree of light transmission.



In a separate kindergarten the children play upon sanitary linoleum brightly inlaid with the forms of their favorite games.

BETTER PLANT PRACTICES • • •



Old car frames were used for the steel construction of this gymnasium and oil well casings for the pillars supporting the framework.

Old Car Frames Used in Gymnasium Construction

That necessity is the mother of invention was never more clearly exemplified than in the construction of a gymnasium for the Girard High School, Girard, Tex. The need for such a building was clearly apparent, but it was a question whether the school budget would permit any such expenditure, particularly when investigation revealed that the steel framework itself would cost more than the school could afford. Further study of the situation led Paul S. Rogers, superintendent, to conceive the idea of using old car frames for the steel construction and oil well casings for the pillars. Such a plan would save the school more than \$1,000.

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

"The gymnasium is 70 feet wide and 90 feet long," Mr. Rogers explains. "It took sixty car frames at a cost of 25 cents each to erect the four steel trusses with a span of 42 feet. These frames consist of Chevrolet and Ford truck channel framed steel, as well as touring car frames of all makes. The pillars supporting the framework are made of used oil well casings secured at a cost of 15 cents a foot. There are eight pillars each 24 feet long. The freight on the casings which were bought in Breckenridge, Tex., was \$5.80. Bolts and rivets used for the construction of the trusses and framework cost \$35. The hack saw blades cost \$4 and the cement and gravel \$3. Red bridge paint was used to cover all of the steel at a cost of \$4.50. The total bill for materials amounted to \$90.30. The labor did not cost the school anything as it was secured through a federal project."

Thinning Paint for Various Woods

So many different woods are used in construction work today, according to the manual of the Sherwin-Williams Company, and these woods have such different characteristics that it is necessary to thin the paint differently, depending upon the wood to be painted.

One cannot, for instance, use the same method of reducing the paint for the so-called soft woods, such as white pine and poplar, which have soft fiber

and open grain, offering easy anchorage and penetration, as one would for hard, resinous woods such as pitch pine, fir or cypress. Pitch pine and fir sometimes have a gum-coated fiber and pores completely filled with hard gums and resins. On these, oil and pigment penetrate but slightly, while turpentine is more effective than linseed oil. That is why larger amounts of turpentine are used for the first or priming coat on such woods.

Cypress has an oily fiber and should be thinned the same as the hard resinous woods, except it is advisable to replace a part of the turpentine with a more volatile thinner, such as solvent naphtha, which more readily dissolves the oil, permitting better penetration.

Pipe Covering Is Economical Practice

How much heating is saved by pipe covering? This question is answered by "The Model Custodian" as follows:

"In general, any steam pipe which is not designed to be a radiating surface for the heating system should be insulated in order to cut down condensation and consequent heat loss. Pipe covering can be bought in molded form in sections 3 feet long and in diameters to fit standard pipe sizes. Fittings, flanges and valves are covered by plastics made of bulk insulating material mixed with water.

"The most commonly used material for pipe covering is the so-called 85 per cent magnesia, which is magnesium carbonate mixed with a binder. Although pipe coverings can be bought in different thicknesses, the one-inch type is most common and economical for low pressure systems.

"Below is shown the heat loss from a bare two-inch pipe and from the same pipe when covered with different thicknesses of magnesia covering. The heat losses are given in terms of B.t.u. per square foot of pipe surface per hour per one degree difference in temperature between pipe and surrounding air.

	Bare Pipe	1/2 in.	3/4 in.	1 in.	1 1/2 in.
Heat loss	3.20	0.77	0.61	0.52	0.41

"From these figures it is seen that a covering of one-inch magnesia will save 3.20-0.52 2.68 B.t.u. per square foot per hour per degree difference in temperature. This results in a saving of about 84 per cent.

"Another use for pipe covering is its application to cold water pipes to stop sweating in hot weather."

The Passing of the Skilled Mechanic

By W. W. SIMMONS

WE ARE now facing a period when we shall not be able to build a decent structure under the strict supervision of an architect, master builder or a practical business man for a lack of skilled and experienced mechanics.

Thirty years ago, an owner, through his architect or master builder, could have started construction on a design requiring complicated and detailed mechanical hand work with every assurance that skilled mechanics would be obtainable for the proper execution of the work; today the situation is different.

These conditions are coming to pass because, in the South, at least, our boys are not learning mechanical trades leading to the building industry. This, the second largest industry in the world, requires more skilled help than any other industry.

Graduates Having Trade Are Scarce

Are our young men too good to put on overalls and get out in the sunshine and learn the carpenter's trade, bricklaying, plastering, plumbing or some other building trade which will pay them from \$5 to \$15 a day? Or is it better to study architecture, engineering, medicine or some other profession obtained by means of long university training at a cost of thousands of dollars, only to spend another year or two hunting for a position with a meal ticket attached when they have finished their course?

Some may think it better still to go to a commercial school for several months to learn typing, bookkeeping or what have you. Then in the next depression they can get on work re-

lief by joining an army of young high school and college girls, widows and numberless white collar men without trade or profession.

In some of our communities a reward could be offered for any young white man who has finished high school, who is under twenty-one years of age and who is learning a mechanical trade, such as carpentry, masonry, painting or other of the allied building trades, and this reward would go unclaimed until time had elapsed to qualify an applicant.

Negro Boys Better Off

The young Negro with only an elementary education has a decided advantage over the white boy with a high school education because the mechanical trades, as well as barbering, butlering and the like, are regarded by the Negro as honorable and desirable.

A great number of white collars have been soiled with an indelible stain, brought about by the misappropriation of funds or of valuable information, but the soil that stains the overalls of the honest workman washes out. Why, then, should a young man, with a schooling sufficient to comprehend the mechanical terms relating to the trade he is beginning to learn, shy from the wearing of garments suited to his work and think he is too good to be seen by his associates wearing work clothes?

His mother or his sisters do not dress up to stand over the cook stove or to wash the soiled linen or to scrub the floors.

Mechanical construction may be hard and cause the young man some

discomforts, but it is honorable. Our Savior worked at the carpenter's trade, Abraham Lincoln split rails, President Hoover worked in the blacksmith shop, and the present United States Commissioner of Education, Doctor Studebaker, was at one time a brick-mason.

Our nation, at this moment is about to enter the biggest building boom the world has ever known; it is entering the boom with the fewest truly skilled mechanics of any age. Through the past generation, in normal building periods and when there was 75 per cent less work than now, there was a great demand for highly skilled mechanics to perform, on time, the proposed work. Now the contractors, labor leaders and federal authorities are discussing rates of pay per hour, number of hours per month and ways by which this enormous amount of construction work and manufacturing of building materials may be executed within the time allotted for its performance.

Criticism, without a constructive remedy, never cures the defect. The remedy is to provide adequate opportunities for young men who want to take advantage of mechanical trade schools—in accredited junior and senior colleges and universities in the case of white boys, and in senior high school and up for the young Negro.

Employers Dictate Wages and Hours

The soundness of the remedy has been proved by the results obtained in many courses where students learn theory and practice together. Records of institutions of learning will show that a great number of students in vocational and cooperative studies have jobs that pay well, while those students who have completed academic courses are seeking employment and allowing their employer to name the kind of work, the number of hours of work, and the pay they shall receive.

To replenish this great shortage of skilled mechanics—a shortage that is increasing each day—there

should be attached to centrally located institutions of learning a well equipped work shop, with practical instructors who can teach the pupil to read drawings, use the steel square, handle properly the tools used by the carpenter and cabinetmaker, the stone and brick-mason, the painter and paper hanger. There should be no effort to make the boy a "Jack-of-all-trades" but he should be taught the trade of his choice with the proper blend of theory and practice.

Where can properly trained instructors be found? It will not hurt to omit some of the qualifications, such as a college degree, asked of in-

structors. Older men who have graduated from the school of experience can teach the handling and sharpening of mechanical tools and can start the boys off on the right foot in their chosen vocation. Such instructors would work as assistants to the institution's superintendent, having as many assistants as there were trades taught.

Architects, builders, manufacturers and dealers in building materials, as well as those interested in vocational education, must be made to realize that now is the time to train the younger generation to replace the fast disappearing highly skilled mechanic.

During 1935 manufacturers sold 9,403 busses, valued at about \$23,000,000 to American schools. This was an all-time high record, more than double the previous peak of 4,582 in 1934.

At the rate new school equipment is going into service, it won't be long before the last one of the 1920 home-made type of school bus will be out of service, according to C. L. Welbourne, who made the study.

The cost of operating America's school busses had not previously been estimated. Prof. Roy W. Roberts' study of pupil transportation in Arkansas, one angle of which was treated in his article "Predicting Pupil Transportation Costs" in *The NATION'S SCHOOLS* for April, 1935, covered the year 1930-1931 and dealt with 261 Arkansas school districts receiving state aid for pupil transportation.

The school bus operators spent in that year 3.7 cents per bus-mile for gasoline and oil, and 1.8 cents per bus-mile for maintenance. California during the nearest comparable year for which figures are available spent 2.1 cent per mile for gas and oil and a similar amount for maintenance. Wyoming's maintenance cost on school busses is put at 3.6 cents per bus-mile.

Mr. Welbourne applies the Arkansas figures to the school bus industry as a whole and arrives at some tentative figures. Taking 200 days to be a good average for the school year in the various states and applying it to a round trip a day over 925,000 miles of route, he gets as the figure 370,000,000 bus-miles for the school bus industry during a year.

By checking this mileage against Arkansas's gasoline and oil, he gets a probable expenditure of \$13,690,000 for gasoline and oil. The maintenance figure, by the same method, would amount to \$6,660,000.

The survey made by the magazine quoted was accomplished with the cooperation of state superintendents of public instruction, transportation superintendents and various other public officials.

Tremendous Gains in School Bus Service

AMERICAN schools to the number of 28,231 owned or contracted for the use of 77,825 busses for the transportation of pupils, according to statistics compiled by the magazine *Bus Transportation*. These busses carried 2,918,657 pupils during 1935, over 924,597 miles of route, at a cost of \$52,621,881.

The average cost of school bus service, based on figures compiled in

five states, was \$18 per pupil. Highest cost per pupil was in Wyoming, \$66.32, while the lowest cost was recorded in North Carolina, \$10.85.

Approximately 70 per cent of the 77,825 school busses counted in the statistical study are believed to be privately owned and operated under contract with school districts, but there is an increasing trend toward school district ownership.



It is a far cry from the home-made school bus of 1920 to this powerful coach of 1936, with its well planned safety features.

Noise Fades From Modern Classroom

By IRWIN T. CATHARINE

WE HAVE become noise conscious. Owing to the publicity given to noise abatement societies throughout the country and the results obtained by either eliminating or quieting noise in their respective cities, and owing to the architectural journals calling attention to the remarkable results obtained with acoustical treatment in hospitals, offices, churches and schools, it was only natural that we should look into the matter in order to keep abreast of the times.

Fifty years ago the method of education was to cram as much book learning into the individual as possible. It was unnecessary for the child to concentrate in the classrooms; his mark depended on how well his memory retained what he had read. It is now the intention of the educator to teach children how to use their God-given ability to think.

Why Noise Has Increased

In thinking, it is necessary for the individual, whether young or old, to concentrate on the subject in hand, and most of us admit that concentration is difficult in the midst of confusion and noise. Psychologists have determined that it is much easier for an adult to concentrate than it is for the adolescent and that the adult who is able to concentrate the best is the one who learned how in his childhood days.

Why is noise now brought so forcibly to our attention as compared to years ago? There are three major factors:

First come structural changes.

Years ago, practically all buildings were constructed of brick and heavy timbers. Wood lath was used, and from one to two inches of heavy porous plaster, which in itself had a certain amount of sound absorption. Flooring and furniture were of wood.

We now build for sanitary and fireproof purposes, and we substitute steel for the heavy wooden beams, concrete for brick, wire metal lath for wood lath, and half inch of hard, non-porous cement plaster for the old porous plaster. In other words, we are now using sound reflecting instead of sound absorbing materials in the construction of our buildings.

School Is Often a Small City

Second is the centralization of schools. Only by centralizing our schools into large units, can we successfully and economically meet present day educational requirements. That is the reason a junior high or a vocational school is often a small city in itself.

Third we have differing educational methods. Instead of a single teacher in one room, teaching from five to eight subjects to thirty or forty pupils, teachers now specialize in one or two subjects, and classes are changed every thirty to forty-five minutes, so that a teacher may have before her several hundred pupils in one day. There are taught under our roof at the present time, such differing subjects as manual training, typing, music, gymnasium and dramatics, in addition to our regular academic subjects.

The consistent turnover in the classrooms of pupils emptying out

into corridors is one of the noise factors of the large modern school. These long, bare "speaking tube" corridors with plaster walls and ceilings faithfully convey along their full length the sounds of footsteps and conversation. Teachers know only too well the problems they encounter in maintaining discipline when the corridors are used—even when only two or three persons are walking through—and during those times when it is necessary to keep the classroom doors open for ventilation purposes.

Then there are the classrooms in which machines operate, such as typewriters, adding machines and sewing machines. There is the manual training department with its lathes and drills setting up vibrations heard and felt throughout the building, unless special precautions have been taken. There are music rooms, where music pleasing to those in the room may be maddening to the teacher in an adjoining classroom and distracting to the class. There are gymnasiums where pupils "let off steam" and throw away restraint. Most of our schools have cafeterias, where during the lunch hours the din of the service is combined with the

In this, the second of a series of two articles on sound absorption, Mr. Catharine, superintendent of buildings, describes experiments made in the Philadelphia school system, with emphasis on the excellent results achieved.

voices of hundreds of school pupils.

In our effort to give the youth of Philadelphia the very best in the line of education, we spared no expense to see that our buildings were properly designed. We gave careful consideration to lighting, heating and ventilation. We have now come to the conclusion that because such a large percentage of our teaching is oral, good acoustical conditions are necessary in our schools so that the excessive noise does not abrogate the cost of effort in our modern school system.

Reducing the Noise Level

A simple test of an acoustically satisfactory room is whether or not the sounds to which we want to listen stand out above any other sound. The most common method of reducing the noise level in a room, and making it acoustically satisfactory, is by the installation of sound-absorbing material upon the walls or the ceiling.

Ordinary building surfaces, such as wood, glass, cement and plaster absorb only from 3 to 5 per cent of the sound that strikes them, reflecting more than 95 per cent of it. Sound travels at a speed of approximately 1,100 feet per second, and it may thus be reflected several hundred times before it is sufficiently reduced in intensity to become inaudible. By installing a sound-absorbent material, the sound waves are absorbed in much the same way that a blotter absorbs excess ink, and they do not have a chance to be reflected back and forth, building up in loudness. In a room having only hard, nonabsorbent surfaces, it is possible for the sound to last from five to ten seconds, and to build up to several times its original energy. The use of a sound-absorbent material decreases the number of reflections necessary for the sound to die out and prevents the sound from building up in intensity.

Having given considerable thought to the subject of noise, and being still slightly skeptical as to its real economic value, we decided first to test the value of acoustical treatment in the work office adjoining my private office. The results were surprising.

The noise and din caused by carrying on the routine of daily business gave place to orderly quiet, and it was no longer necessary for the occupants to raise their voices in order to be understood. One of the enlightening incidents brought to our attention was the fact that one of the occupants is hard of hearing and it was difficult for this person to hear in the untreated room unless the speaker raised the voice. After acoustical treatment, this person could hear anyone speaking in a quiet, modulated tone. Another thing brought to our attention was that acoustical treatment added to the dignity of the office, particularly in view of the fact that a large volume of outside business is carried on over the counter.

After a year or so we decided to experiment with a few classrooms in two of our large school buildings. These rooms were carefully selected to cover the greatest number of varying conditions, so that we could obtain the effect of the treatment on those within the rooms and those in adjacent rooms.

Teachers Are Enthusiastic

The teachers and instructors using the four treated rooms were astounded to find the effect that noise had upon hearing. They had a good opportunity to study the effect as they divided their time in teaching in the treated and untreated rooms, and this awakened them to the fact that there was a difference in the demeanor of the classes.

Then we began to receive requests from the teachers and principals of these two schools for more acoustical treatment, some saying they would like to see it all over the school, and speaking most highly of the beneficial results of the treatment.

Early last year we installed large areas of acoustical treatment in one of our large schools, and are just finishing in another. Investigation and questioning of the teachers brought out the following interesting facts:

The noise in the corridors was greatly reduced, better behavior was noted in the passing of classes, and

there was little or no disturbance in classrooms at change of classes. The rooms had a restful, dignified atmosphere, which reacted favorably upon the conduct of the children.

Before acoustical treatment was installed, the children began to get restless about the middle of the period; their attention lagged and their minds began to wander. This increased as the period wore on. Since acoustical treatment has been installed, the classes find it easier to concentrate throughout the entire period because it is unnecessary to strain (especially those in the rear) to hear what the instructor is saying. Discipline is more easily maintained, and whispering is discouraged because it is easily heard throughout the room.

It is a great help to those children who are shy and have weak voices. Before acoustical treatment was installed, repeated urging of the instructor to speak so as to be heard resulted in discouragement on the part of the child. The fact that now he can get up and hear his own voice, and know he is heard throughout the class, gives him confidence.

Outside noises are muffled and do not distract attention or break concentration of either instructor or class. Under acoustical treatment, teachers and instructors find that it takes considerably less effort to teach and get their subject across to the class. It is easier to hold the children's attention, and they do not have that "fagged out" feeling at the end of the day.

Six Gains Made

Let me summarize the value of acoustical treatment in our schools as follows: better hearing for pupils; easier concentration; better behavior; less disturbance from outside noises, and easier teaching and better supervision of classes.

We know that poor lighting and poor ventilation have a deleterious effect on efficiency, although we are not sure just how much, and it is difficult to explain just the manner in which it affects the individual. But it does. Excessive noise affects us, too.

A classroom in Park School, Hibbing, Minn., showing glass brick walls with Venetian blinds on the inside. Each classroom has more than twice the glass area ordinarily used. (This photo is by Universal Newsreel from Underwood & Underwood)



AN INTERESTING application of glass brick to modern school construction is revealed in the Park School, Hibbing, Minn. Although popular for some time in foreign countries, the use of glass in brick form in treating wall spaces and creating novel decorative features is comparatively recent in this country, marking nevertheless a definite trend toward the strictly modern influence.

In Hibbing, it forms part of an ultramodern school layout designed by J. C. Taylor. The building accommodates 120 children from the kindergarten to the fourth grade. Its east and west walls are practically all glass. Thus each classroom has more than twice the glass area ordinarily used in regular classrooms or required by state regulations.

Bricks of glass measuring 6 by 6 by $2\frac{3}{4}$ inches are used, laid in cement mortar with each alternate horizontal joint reenforced with reenforcing steel. These units are hollow, averaging 65 per cent vacuum, which serves as an insulator to heat, cold and sound, but they do not carry any structural loads. The glass is clear like ordinary window glass but does not provide clear vision because the planes are not ground and each surface is not parallel to the other.

This particular type of glass is hand-blown and as an insulator is equal to a 16-inch masonry wall. It also has the advantages of low maintenance cost, according to Mr. Taylor, better control of temperatures, lower heat cost and increased light area. Furthermore, in a cold

climate such as Minnesota the glass construction permits cheaper installation of equivalent areas of wood sash, frames, storm sash and weatherstripping. It also means a saving in painting, varnishing and hardware costs. Venetian blinds are used on the inside of each glass opening to control the light rays and to check possible eyestrain during bright sunlight.

"There are no windows in the building that can be opened," Mr. Taylor explains. "This is not required, as the air conditioning unit is designed to provide fresh air to each room throughout the day at a rate of 30 cubic feet per minute per pupil.

"Thus heating and ventilating equipment is located in the basement. It is the air-conditioning type, designed to recirculate from 75 per cent to none of the foul air. This type of design takes anywhere from 25 per cent to 100 per cent outside air and delivers it to each room at any desired temperature. The heat in each room is controlled with an electric thermostat, which can be set to any desired temperature. It is impossible to overheat from the sun's rays or

by occupancy because this type of system provides an absolute individual room control. All air passing into the system is filtered through removable filters; then humidity is automatically introduced to any desired saturation. The heat for the building is supplied from the municipal heating plant.

"Illumination of the building is the semi-indirect, closed unit, prism type, with reflecting liners to reflect light upward and at the same time provide enough transmission to illuminate the lower bowl. The reflecting prisms bend the light outward to give a wide spread on the ceiling, and the diffusing prisms spread the light uniformly on the ceiling to prevent bright lines and fixture shadows. The light output upward is 80 per cent and 20 per cent downward. Each room is provided with six 300 watt fixtures.

"All lighting fixtures in classrooms are automatically controlled with a photo electric relay, or eye, which actually turns the lights on or off at certain stated foot candle standards. This feature ensures proper illumination. In the same way a thermostat provides a uniform heat."

Through Walls of Glass

Modern Dress for the School Lunch Tray

By MAUD E. STITT

THE luncheon period in the modern school should be placed on the same high educational level as other periods in the day. To this end, the cafeterias in the Tulsa public schools make of the lunch hour a laboratory in which pupils practice good habits in nutrition and thrift and experience a social hour in desirable relationship.

To serve as guide to the child in his choice of food, the plate lunch is offered in all cafeterias. On the plate one may choose one-half pint of milk, bread and butter sandwich, one serving of green vegetable and one serving of meat, meat substitute or starchy vegetable. Five-cent servings of food are also offered for sale, but the child is encouraged to choose the plate lunch from both the nutritional and economic standpoint.

With the adoption of such a policy, the necessity for enlisting the cooper-

Equipment for tray set-ups to meet changing conditions is a problem that every cafeteria director faces. Miss Stitt describes in detail the tray itself, as well as the flatware, china and glassware that go on it.



Particular attention is given the selection of equipment for tray set-ups in the school cafeterias of Tulsa, Okla. The tray itself is chosen for size of china, pieces it is to hold and age of child.

ation of the teaching staff is apparent, since the cafeteria alone cannot cope with the teaching problems involved. Health teaching may be furthered by sending nutrition lessons, based on the cafeteria menu, to the teacher to present to classes. Our daily newspapers gladly cooperate by printing weekly menus, informing the public regarding the type of foods that will be offered for sale. Parental education classes may be most helpful in presenting cafeteria problems that the home may aid in solving.

With us always are some living examples of poor food habits who maintain that the child's selection of food is not a problem of the school, and that one should be allowed to choose anything from the school cafeteria counter that he might buy at the hamburger stand around the corner. Only casual observation of a group of school children is sufficient evidence of the dire need of more health teaching. For such teaching where may a more ideal laboratory be found than the school cafeteria?

Operating upon such a basis re-

quires careful planning. Perhaps it may develop that many things formerly believed to be necessities are unjustifiable expenditures. The use of glasses or paper cups, for example, is unnecessary in elementary and junior high schools in which the lunchroom and halls are equipped with bubbler fountains. Since the majority of children choose the plate lunch with milk, the glass of water is not desired. For elementary schools, the purchase of knives and soup spoons are an unjustifiable expense, as sandwiches are buttered and only those foods are served that require the use of the teaspoon and fork.

One of the perplexing problems that the cafeteria director faces is that of the standardization of equipment to meet with changing conditions. Selection of equipment for tray set-ups in Tulsa is based upon the last five years of operation with plate lunches served in thirty-nine cafeteria units, the largest feeding 3,000 pupils daily, the smallest only 25.

In choosing a tray, consideration should be given to the size of the

Summer Holidays ARE NEAR!

And so is THE TIME TO MAKE REPAIRS AND ALTERATIONS IN YOUR SCHOOLS

YOU'RE probably figuring on them right now. New helps for your teachers. New playground equipment, perhaps. What about the soap system in your washrooms?

You teach healthful cleanliness. But do your pupils get an opportunity to put it in practice while in school?

Now you can promote cleanliness with a washroom soap system that *costs less than 1/100¢ per wash to use!* It's the Palmolive "Measured Soap" System.

A better, more modern system

The Palmolive "Measured Soap" System is a dry soap system that actually encourages cleanliness. The specially designed Palmolive dispenser never gets out of order . . . never cakes or corrodes. Every time, it *measures out* the same amount of soap, without waste.

The soap is pure Palmolive

The soap itself is Palmolive, in special form. It breaks into a rich lather almost immediately, assuring quick cleanliness without waste. It's soothing to the skin and at the same time gives a thorough

cleansing. It contains only olive and palm oils . . . the safe ingredients that have made Palmolive the world's largest selling toilet soap.

Saves you 30% to 40%

Best of all, the Palmolive "Measured Soap" System actually saves you as much as 30% to 40% on your washroom soap costs. It gives *100 washes for less than 1¢.*

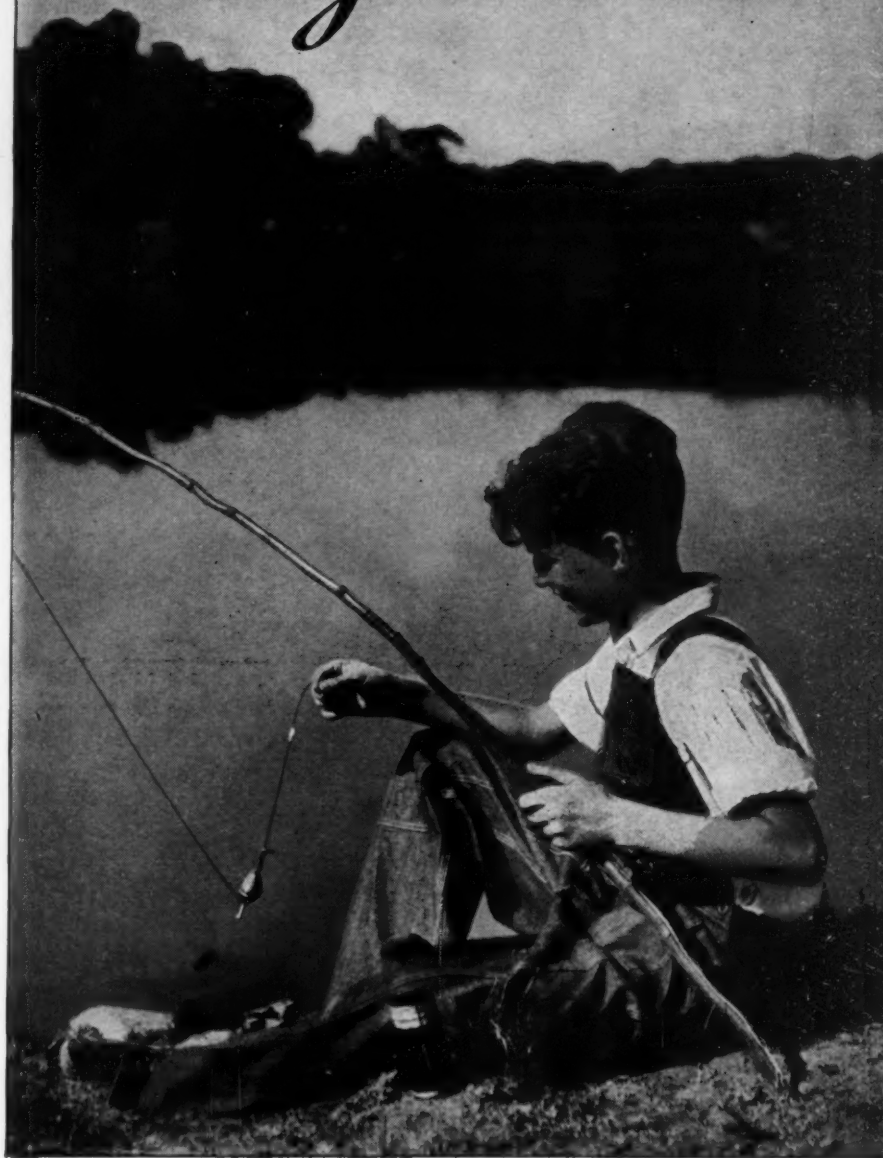
We invite you to write us TODAY for complete information about Palmolive "Measured Soap" and other C.P.P. services that will help you cut down maintenance expenses. All information is free, of course. No obligation. Get ready for next year in *your schools . . . now!*



EASY TO INSTALL

It takes only a few minutes work to install the Palmolive "Measured Soap" Dispenser. Built of

solid bronze, heavily chromium plated. No parts to wear out. It gives years of trouble-free service.



Free! **HELPFUL NEW MANUAL**

"School Cleanliness Problems"

Buying soaps for building cleaning is a specialized job. You'll find our manual, "School Cleanliness Problems," *will help keep maintenance soap costs at a minimum.* Why not write for it today? No obligation, of course.

PALMOLIVE "Measured Soap"

THE NEW, ECONOMICAL DRY SOAP SYSTEM

Colgate-Palmolive-Peet Co., Jersey City, N. J.

various pieces of china that it will hold and the age of the child who is to carry the tray. It should be light, durable, nonbreakable, economical and easily cleaned. The aluminum tray with aluminite finish possesses these characteristics. This finish is resistant to smudging when in contact with the metal tray rail, thereby eliminating hours of cleaning trays, china and tray rails; it prevents dissatisfied, smudgy-fingered customers. Those who own trays without this new finish need not discard them. Alumilite can be applied at approximately one-third the initial tray cost.

Much breakage of china and spilling of food may be attributed to improper selection of trays. For children of elementary school age, the tray must be small enough to be carried with ease when filled, yet large enough to permit selection of an adequate lunch without overcrowding it with food.

A tray measuring $13\frac{3}{4}$ by $10\frac{5}{8}$ inches has proved most satisfactory

for use in the Tulsa elementary schools, and one $16\frac{3}{8}$ by 12 inches for junior and senior high schools. The number of trays to be purchased will vary with the number and length of the lunch periods and with the size of the groups to be fed. Many schools have two or more lunch periods. This allows time for dishwashing to begin between periods and to continue through the remainder of service. Obviously less equipment is required by this method. In specifying the quantity of trays for such service, 75 per cent of the number of pupils served daily is used as the quantity to be purchased.

Choosing Silverware

The choice of silverware is often puzzling to the school lunchroom executive, as yearly losses may be great. These losses cannot be entirely controlled, because various groups may decide to adopt the fad of collecting silverware as souvenirs. The cafeteria is also the loser, when high school jokesters place silverware in

the pockets of unsuspecting pupils ahead of them in the line, thereby creating embarrassing moments later in the day when the victim unexpectedly pulls the silver from his pocket. Loss may also occur through silver being scraped into the garbage, particularly if pupil help is used instead of paid employees.

With such losses it seems impractical to buy $10\frac{1}{2}$ -pound extra heavy weight silverware, even though it is recommended as being most economical. It is also unsatisfactory to buy nickel silver, for this soon becomes unsightly, and employees must spend too many hours polishing it to keep it even partially presentable. The ware has limited use when only one meal is served daily, and one-half plate will probably last longer than the cafeteria can keep it without loss.

A flat piece with no design requires much less time for polishing, hence the Windsor pattern is most acceptable. For both economy and ease of cleaning, the purchase of one-half plate has been found most practical with overlay, 9-pound blanks on 18 per cent nickel silver, Butler finish, Windsor pattern. The twelve pennyweight dessert knife is used in junior and senior high schools where there may be need for knives.

Placing silverware at the end of the line has proved advantageous in that the pupil selects only those pieces necessary, thereby cutting down the quantity to be purchased and eliminating much useless silver washing.

When Buying China

The breakage problem on china may be partially solved by the purchase of china that will withstand severe treatment. A thoroughly vitrified body of American process china, which will pass government requirements on crazing and impact, should be specified for use in schools. Copies of the federal specifications may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at a cost of 10 cents.

While the initial cost of the purchase may be greater, the replacement

CHART OF EQUIPMENT, TULSA PUBLIC SCHOOLS CAFETERIAS

Equipment	Size	Description	Use	Per Cent of Pupils Served Daily
Trays	Top Outside $13\frac{3}{4}$ by $10\frac{5}{8}$ in.	Stamped wrought aluminum with beaded edges, hotel ware, aluminite finish.	Element.	75
Trays	Top Outside $16\frac{3}{8}$ by 12 in.		High schools	75
Plates	9 in. actual	2 pin line, roll edge, first grade, vitrified Am. process	Plate lunch All schools	75
Plates	$5\frac{1}{4}$ in., actual		Salads, cake All schools	$33\frac{1}{4}$
Fruits	$4\frac{1}{4}$ in., actual		Dessert and 5c service of other foods All schools	60
Bowls, oatmeal	5 in., actual, 10 oz.		Soup All schools	$33\frac{1}{4}$
Tea saucers	$6\frac{1}{4}$ in., actual		Pie, salads High schools	$33\frac{1}{4}$
Tea cups	$7\frac{1}{2}$ oz.		Cocoa All schools	15
Custard cups	4 oz., actual	Vitrified cooking ware	Custards All schools	20
Teaspoons		$\frac{1}{2}$ standard plate with overlay, Butler finish, Windsor pattern, 9-lb. blanks on 18% nickel silver.	All schools	75
Forks	Dessert		All schools	75
Spoons	Dessert		Soup High schools	$33\frac{1}{4}$
Knives	Dessert	12 dwt., one piece, solid handle with silver-plated blade, Windsor pattern, Butler finish.	High schools	20
Sherbets	$5\frac{1}{4}$ oz., actual	Low foot, pressed glass.	Puddings High schools	$33\frac{1}{4}$
Glasses	8 oz., actual	Nonnickable edge glass	Faculty use All schools	10
Salt & peppers	$3\frac{1}{2}$ in. high	Pressed glass Silver plated noncorrosive Metal top	All schools	1 set per table



TOWERING ABOVE THE CROWD

The highest building in the world, the Empire State Building, towers 85 stories into the air—1250 feet from the ground to the top of the dirigible mast.

In Institutional Ware, It's SYRACUSE *China*

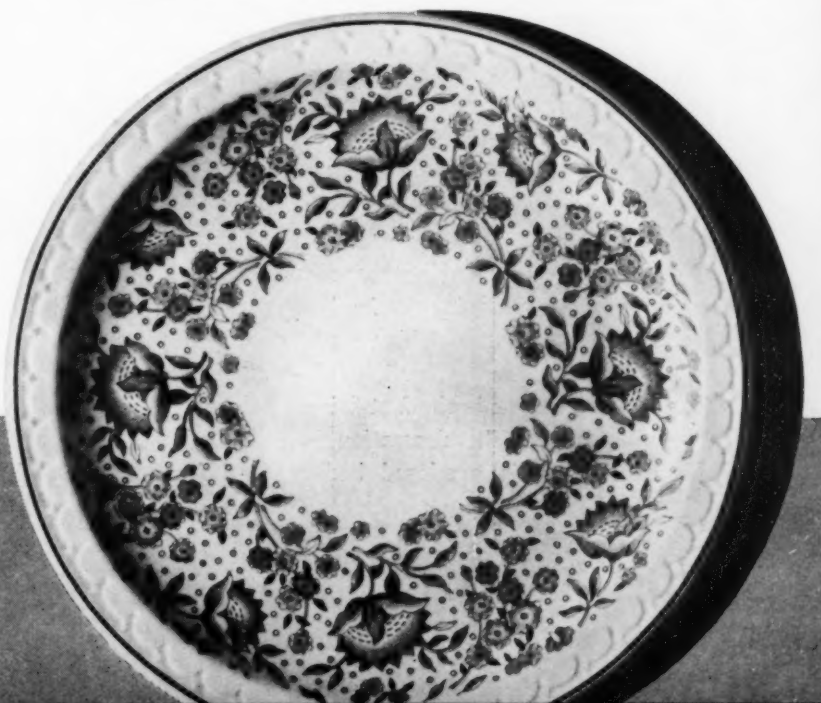
There are many reasons why Syracuse China has become the unquestioned leader in the field of institutional china. It is the strongest, most durable china made—lasts longer—costs less per year. And when breakage does occur, replacements are always quickly available.

The colors are protected by a hard glaze—they can never fade or wear off. Yet they are as bright and clear as over-glaze colors. And every piece is unconditionally guaranteed against crazing (crackling of the glaze).

Many attractive patterns in stock for immediate delivery—on white, Old Ivory or Adobe body—with conventional rims or the new space-saving Econo-Rim. Or, if you prefer, we will design your own special

pattern for you, incorporating any symbol or motif you desire.

Ask your supply house for complete information. Or write direct to: Onondaga Pottery Company, Syracuse, New York. *New York Office:* French Building, 551 Fifth Avenue. *Chicago Office:* Garland Building, 58 East Washington Street.



SYRACUSE CHINA

A PRODUCT OF ONONDAGA POTTERIES
Potters to the American People since 1870

TYPICAL MENUS SERVED IN
TULSA PUBLIC SCHOOLS

MONDAY

Meat pie
Mashed potatoes and gravy
Buttered green beans
Pineapple cheese salad
Combination salad Chocolate cake
Cup custard Ice cream
Fresh fruit

Plate Lunch

Meat pie or mashed potatoes
Green beans or pineapple salad
Bread and butter sandwich
 $\frac{1}{2}$ pt. milk

TUESDAY

Baked beans Hot potato salad
Buttered spinach Apple sauce
Head lettuce salad
Banana cake Chocolate pudding
Ice cream Fresh fruit

Plate Lunch

Baked beans or potato salad
Apple sauce or spinach
Bread and butter sandwich
 $\frac{1}{2}$ pt. milk

HALLOWEEN

Witches' brew (vegetable soup)
Escalloped chicken and dressing
Mashed potatoes and gravy
Creamed peas and carrots
Brownie salad
Frosted coconut gingerbread
Halloween apples Ice cream
Fresh fruit

Plate Lunch

Chicken and dressing or potatoes
Cr. carrots and peas or soup
Bread and butter sandwich
 $\frac{1}{2}$ pt. milk

The plate lunch is served for ten cents in elementary schools and twelve cents in junior and senior high schools. Individual servings of any food on the counter may be purchased at 5 cents a serving. All cafeterias use the same menu, with high schools adding variety as necessary for service to older pupils. Special occasions and holidays are featured.

which is dipped and fired again in the gloss kiln, making a permanent decoration under the glaze. The reverse is true of foreign process china; the body has little strength and the decoration applied over the glaze soon wears off, making a most impractical piece for lunchroom use.

Decoration Is Desirable

Some decoration on china for school lunchrooms is desirable as food appears more attractive on the decorated plate and the children are more likely to handle decorated china with care. China with simple decoration of bands is usually priced from 25 to 50 per cent higher than white china, but the additional cost is not all due to decoration, as many erroneously believe. Plain white, undecorated china has certain defects that make it inferior in quality to the decorated piece, otherwise it would not have been left white. Consequently, school lunchroom operators are justified in paying the additional percentage for a simple decoration.

Much annoyance and confusion to those handling the china order may be prevented by specifying actual size, since a plate that is termed 7 inches in trade size is actually 9 inches in diameter. The roll edge is desirable and helps to prevent chipping. Fortunately the flatter roll edge plate does not have the clumsy appearance that it formerly had.

For the plate lunch, the 9-inch actual size plate is used in all schools. The 5½-inch plate is used for salads and cake in elementary schools and either the 5½-inch plate or the 6¼-inch saucer in junior and senior high schools. Although saucers are less attractive in appearance, some managers prefer to use them as pie does not slip to the floor with ease as it does when served on plates.

The 10-ounce soup bowl is large enough for 5-cent service, yet small enough to be used for soup served with the plate lunch. Five-inch fruit dishes are used for desserts in all schools. Four-ounce custard cups of vitrified fireproof cooking china are used for custards and molded pud-

dings. Quantities to be purchased are shown on the equipment chart.

Though the breakage problem is greater, increased sales on many nutritious desserts justify the use of glass sherbets in high schools and other schools in which children have sufficient lunch allowance to permit them to buy a dessert. Since desserts, regardless of color, are attractive when served in clear glass, it is impractical to buy colored glassware that may not be used harmoniously with various colors of desserts. The 5¼-ounce low foot sherbet is most attractive and satisfactory for service of puddings and other soft desserts that cannot be displayed advantageously in fruit dishes. Glasses are used only for faculty members and glassware of a good grade, with a nonnickable edge, is purchased for their use.

Changing conditions require careful study and new developments in tray equipment must be closely watched. Of paramount importance at all times, however, are such characteristics as durability, simplicity and economy.

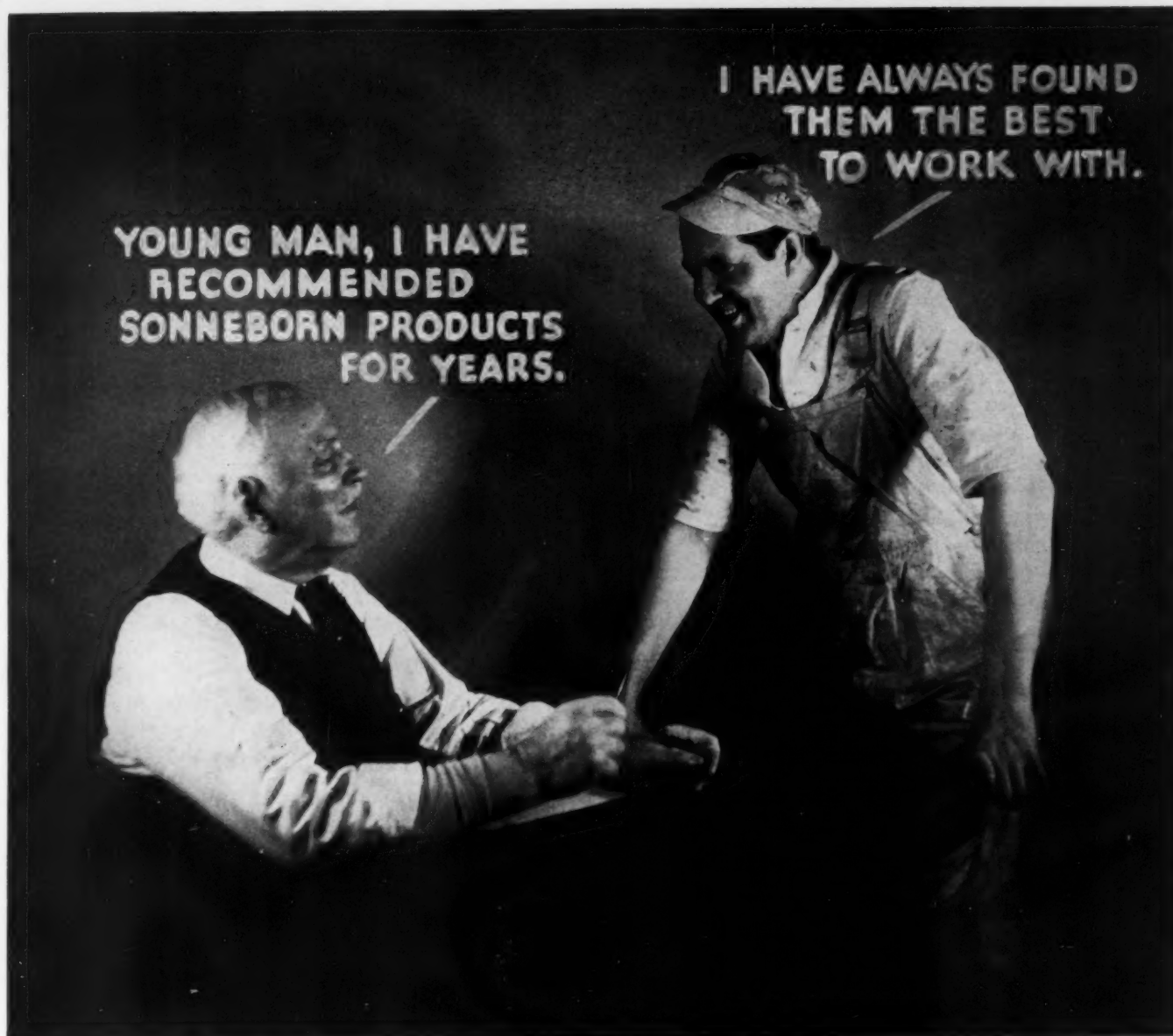
Experimental Recipe Sheet
Proves Helpful

Before any recipe is put into a permanent recipe file, Mae D. Paige, director, West Hartford School Cafeterias, West Hartford, Conn., believes it desirable that it should be tried out in the quantity to be served. For this procedure she recommends an experimental recipe sheet. Each dietitian cooks the dish and returns the sheet properly filled out. From all these observations a corrected recipe is established.

The sheet is divided in two vertically, with suggested data on the left and with notations concerning actual practice on the right. Under "Suggested" are spaces for the name of the dish, date, amount, number of servings, ingredients, method and temperature. Under "Actual" the dietitian lists the amount, number of servings, temperature and what changes she would make to improve the dish.

will be a small item in comparison with cheaper china.

Some question may be raised regarding the terms "American process," and "foreign process," which refer to method rather than to the place of manufacture. For example, there are potteries in America using the foreign process of manufacture. China made by the American process gets its vitrification and strength in the first firing or bisque stage. The decoration is also applied to the unglazed body,



YOUNG MAN, I HAVE
RECOMMENDED
SONNEBORN PRODUCTS
FOR YEARS.

I HAVE ALWAYS FOUND
THEM THE BEST
TO WORK WITH.

They Agree on Sonneborn Quality

School Superintendents, leading architects, builders, and painters, throughout the country, have recommended products made by SONNEBORN because they have used them successfully for years in school buildings.

Over a quarter of a century of scientific research by competent laboratory technicians, keeping abreast of the times with every new development in the school building field, have made SONNEBORN'S Waterproofing, Damproofing, and Paint Products the most reliable on the market.

This successful record of the proved efficiency of these products is the school board's and superintendent's best assurance of satisfaction.

Write for literature of SONNEBORN'S tested products

Sonneborn's Tested Products

LAPIDOLITH—The guaranteed method of securing dustproof concrete floors.

LIGNOPHOL—A scientific penetrating preservative and finish for wood floors.

HYDROCID COLORLESS—For exterior waterproofing of masonry walls.

SONOMEND—For patching and resurfacing wood and concrete floors; an easy to use method for prolonging the use of floors.

KAUKIT—Non-shrinking waterproof caulking compound.

CEMCOAT—Light reflecting enamel for interiors; also waterproof coating for exteriors and floors; is outstandingly superior for masonry surfaces.

CEMENT FILLER AND DUST-PROOFER—Double service plus decorative floors; a penetrating, tough flexible floor coating of outstanding performance.

STORMTIGHT—Roof protection, a name that guarantees maximum roof protection at minimum cost.

FOUNDATION TO FLAGSTAFF—There is a suitable Sonneborn product for every problem of surface conservation.

L. SONNEBORN SONS, INC. 88 Lexington Ave., New York City

Routing the Rat

By JOSEPH N. LAFERRIERE

IN NEW all-metal or all-stone buildings, with solid walls and floors, rat poisons may be used without hesitation, because if a rat dies inside, it can easily be reached. Poisons may be also employed in the smaller old buildings, for the sick rat will have time to seek its harborage outside.

A complete description of traps and baits will be found in Farmers' Bulletin No. 1533 of the U. S. Department of Agriculture. The directions given there have been carefully worked out by rat specialists.

Rat traps can be considered a permanent investment, and with proper care should last for years. The simple snap trap, of which there are many on the market, is effective. It should be strong, with a sensitive trigger, and a spread of 5 inches; the larger the trigger, the better.

The number of traps needed depends upon the size and number of the buildings. They should be oiled frequently—with any oil except kerosene—in the hinges, on the trigger and on the notch. An occasional dip in melted paraffin will prevent traps from rusting. If the notch wears, it can be deepened with a file. Cage traps are also useful; the rats are drowned in a pail of water.

Need Fresh Baits Daily

A trapping campaign should be short and decisive. The baiting is important. Fresh baits should be used daily. They should be amply large and securely tied to the treadle so that the rat will pull on them and thus release the spring.

According to one authority, "a variety of baits, such as meat, vegetables and cereals, on successive traps

will usually give better results than one kind of bait only. One of the best single baits is a doughnut. Bread is also good, but both of these must be fresh, for a rat will usually ignore either of them if it is a little stale. Among other foods that may be used as alternatives are raw or cooked meats, bacon, fish, apple, melon, tomato, carrot and nut meats." Like all rodents, rats are great vegetarians.

A prebaiting campaign is advisable. The traps are baited for two or three days before they are set, so that the rat becomes used to them. This practice will give an idea of the number of rats in the building.

As explained in a previous article, the rat man avoids handling the trap. This rule is absolute. New traps, even if made of steel, should be washed in hot water, dried in the sun and smoked. After use, the trap should be cleaned again, all traces of blood removed with a brush and the trap scented with aniseed or rhodium oil.

Placing Traps in Prebaiting

When possible, the trap should be set on the runway. On a shelf, for instance, the rat, in his rush, will step right on the trigger. In placing the traps in prebaiting, one should be careful not to remove any object familiar to the rat's landscape. When the rat has begun to feed, it is a sign that he has become accustomed to the trap. It is better to place the trap some distance from the rat hole. When a run emerging from a rat hole is not clear, a little flour may be scattered around and the next morning the trail will be clear.

For the few trap-shy rats that may survive, luring is often effective. In making a scented trail from the hole,

A trapping campaign should be short and decisive, according to this consulting entomologist. In the second of two articles on rat extermination, he discusses the care and setting of traps and tells what raticides to employ and how.

put two or three drops of rhodium or aniseed oil on a rag and pass it over the bait and the trap. A pan of water is also welcome to the ever-thirsty rat. Finally, luring is especially indicated when adhesive papers are employed in rat control.

In trapping mice, the same principles may be applied, though the mouse is less cautious. Yet even it sometimes becomes shy of the trap. Poisons should not be used with mice, as they will die between the walls.

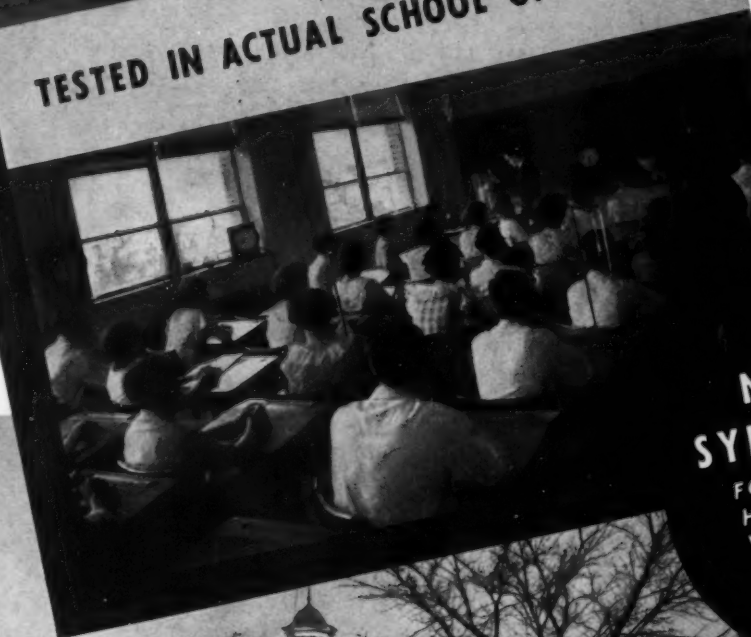
Raticides must be slow enough in their action to give the sick rat time to leave the building for its watering place or its burrow. With strychnine, for instance, the nervous system is so quickly affected that the rat dies within a few feet of the bait.

With phosphorus, on the other hand, the action is slow enough to permit the rats to vacate the building. They do not object to its odor or its taste, and there is fire hazard only when the percentage of phosphorus in the paste is too high, and when the paste is not thoroughly mixed. Though undoubtedly effective against rats, phosphorus is poisonous, and in the absence of a good antidote is considered unsafe for general use, one authority declares. According to an-

BUILT IN THE RESEARCH LABORATORY



TESTED IN ACTUAL SCHOOL OPERATION



NESBITT SYNCRETIZERS for classroom heating and ventilating are built first in the research laboratory and then given every conceivable scientific test by a staff of engineers whose entire efforts are devoted to the design and manufacture of school room heating and ventilating equipment. But research alone is not sufficient — our engineers must know how they'll operate under actual school conditions. Test installations are made — checked hourly, daily and weekly, under all conditions, to give you scientifically correct indoor air with the maximum fuel economy. Investigate Nesbitt Syncretizers now for your new school building or remodeling the heating and ventilating system in your present building. Phone or write our nearest branch office.

AMERICAN BLOWER CORPORATION • Detroit, Mich. Division of American Radiator & Standard Sanitary Corporation.

**NESBITT
SYNCRETIZER**

FOR CLASSROOM
HEATING AND
VENTILATING

Sold by
**AMERICAN BLOWER
CORPORATION**



**INSTALLED IN SCHOOLS LIKE THE
NEW YORK STREET GRADE SCHOOL, LAWRENCE, KANSAS**

AMERICAN BLOWER CORPORATION

6000 RUSSELL STREET, DETROIT, MICHIGAN

Branch Offices in all Principal Cities

other, there is absolutely no proof that phosphorus will dry up the body.

White arsenic, or arsenious oxide, is another slow raticide; it results in purging and a severe thirst, causing the rat to hasten to its watering place. Tasteless and odorless, this raticide is dangerous to pets and human beings, and great care must be taken in its use. The dosage is 1 part poison to 20 parts food.

Thallium sulphate, a new raticide, is also without taste or odor and is sufficiently slow in action. However, it is extremely dangerous for human beings, because it has no warning quality and there is no known antidote. For rats, it is thirty times as toxic as barium carbonate, a common raticide. The commercial preparations are in the form of a paste. This cumulative poison of high toxicity, when found necessary for the control of highly resistant species of rodents, should be entrusted solely to persons who understand its dangerous qualities and who exercise care.

How to Use Barium Carbonate

The safest and most satisfactory raticides for use in buildings are barium carbonate and red squill. Barium carbonate was a great favorite until recently. It is almost perfect with its lack of taste and its relatively mild toxicity to other animals, which are seldom harmed by the small doses found in rat baits. It produces an intense thirst and leaves the rat plenty of time (from a few hours to several days) to seek its nest. The dose is 20 per cent. If the bait is mixed with 20 per cent of this poison, only 5 per cent of the rats will survive. Most die within sixteen hours. It should be kept out of the way of pets.

Before using this poison, one should read the carefully worked out directions of Silver in the Farmers' Bulletin No. 1533, previously mentioned. If three varieties of food are offered, the rat has a choice and is more likely to be tempted. It is recommended, then, to mix separately with barium carbonate one of each of the following classes of food: "Cereals, such as bread, corn meal and rolled oats;

meats, such as Hamburg steak, sausage, sardines or eggs; fruits and vegetables, such as apples, melons and tomatoes."

The powdered barium carbonate is mixed into the soft cereal or the ground meat with a spoon, in the proportion of 1 part to 6 parts of the food. Water is added to make the bait moist. For a permanent bait, it is mixed with flour or oatmeal and will keep indefinitely.

How to Use Red Squill

Since 1923, barium carbonate has been largely replaced by red squill, which is almost as harmless to human beings and domestic animals. Pets will not touch it because of its acrid taste, and if they do eat it, it acts as a violent emetic. Rats do not at all object to its taste, and by a singular accident of nature, they are unable to vomit. Consequently red squill is practically a specific.

For the use of red squill, one should consult Farmers' Bulletin No. 1533 by Silver, and Leaflet No. 65 of the U. S. Department of Agriculture by Silver and Munch. The poison is sufficiently slow in its action. Rats eat a fatal dose, usually become lethargic within an hour or two, and after four to fourteen hours begin to show the characteristic tremors and rolling motions. These continue for half an hour, or possibly twenty-four hours, until death. The standard product may be obtained at the government plant, which is under the direction of the College of Agriculture at Amherst, Mass.

Enough bait must be set out to destroy every rat in the colony. The best results are obtained when several kinds of food are exposed to tempt the appetite of every rat. One of the greatest rat men of our time invariably uses three kinds of food. The rat then is bewildered in his choice; he may be wise enough to pass up one bait, or even another, but he will fall for the third! At such a time all food supplies in the building are removed, if possible.

The Bureau of Biological Survey (Silver and Munch), as the result of

long experience, recommends the following baits:

1. Fish, either fresh or ground in a meat chopper; or a cheap grade of canned salmon, canned mackerel, or sardines in oil. A thin paste is made with 1 ounce of squill powder; then it is mixed thoroughly with 1 pound of fish. Or the paste may be added to 1 pound of meat, usually Hamburg steak.

2. Cereals. One ounce of the squill powder is mixed dry with 1 pound of cereal meal, such as oatmeal, graham flour, corn meal or bran. This is still more tempting to the rat when it is changed into a mush with 1 pint of sweet milk or water.

3. Fruits and Vegetables. These are sliced and then sprinkled with the powder.

A large number of small baits are more effective than a few large ones. They may be exposed—in pieces about the size of a marble—in small squares of newspaper or in small paper sacks closed by twisting the tops. Each variety should be wrapped separately and placed in sequence, first a meat bait, then a fish bait, then a cereal bait, and so on. The fresh baits are set out late in the afternoon and should be left out for three days, after which they can be destroyed.

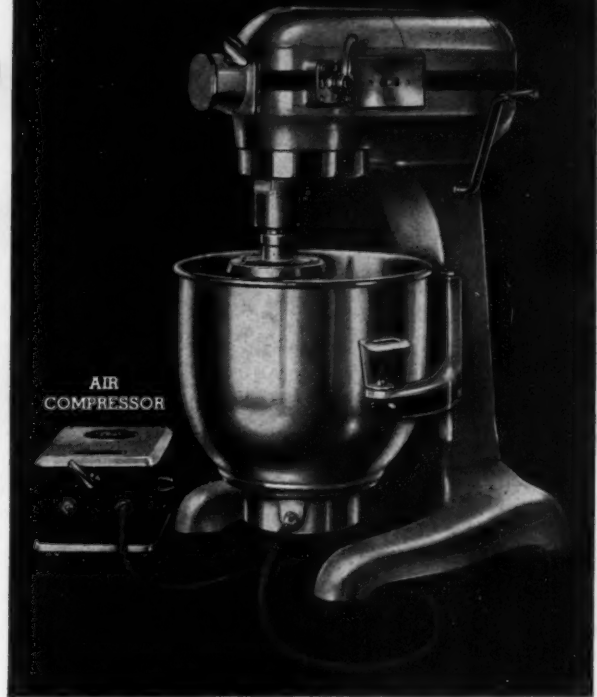
Destroying the Harborage

Squill powder is just as effective when mixed in a dry cereal meal, and in this form will keep in good condition for a long time in poison caches, which may be laid out against stray rats that may come in from time to time. As squill has a specific taste that may be remembered by the rats that have survived, it is better to change to barium carbonate in a second application or to use prebaiting.

An exterminating job in a building would not be complete without complete destruction of the harborage, which, as explained before, must be sought outside under low lying floors and covered areas. Then the building should be ratproofed. Information relating to ratproof construction and repair is furnished on request by U. S. Department of Agriculture.

We've done it!

a 20-qt. Mixer a 12-qt. Mixer All in One Hobart Machine





POTATO PEELERS—Stop that LOSS in peeling! Bench type Peeler shown. Also larger capacity floor models. Peel "skin deep."

SLICERS—Hobart slicers measure costs—**PREDETERMINE** any thickness of slice (Meats, Bread, Cheese, Vegetables.)





FOOD CUTTERS—Handle large quantities of Vegetables, Meats, Fruits, Nuts, in remarkably short time. Also operate Attachments.

AIR WHIP—Better and more whipped cream at less cost. 3 Quarts or more from 1 Quart of liquid cream!





DISHWASHERS
HOBART-CRESCENT
The most complete line of up-to-the-minute equipment to match any kitchen's need exactly.

ONE RUGGED HOBART Bench-Type Mixer now brings to your kitchen the equivalent of TWO popular-sized mixers—in actual range of operation! **SCIENTIFICALLY CORRECT** Mixing for both 20-Qt. and 12-Qt. jobs has at last been achieved in a single unit. The new Hobart 20-12 is definitely designed as a **COMBINATION** of 20-Quart and 12-Quart Models. It is **NOT** a big mixer "trimmed down." Neither is it a small mixer "built up." It is **COMPACTLY** made. Economical in use of power, and extremely practical for small, quick jobs. But likewise a powerful Hobart 20-Qt. Mixer, in every sense, when it comes to heavier jobs. It operates large attachments for slicing, chopping, grinding and sieving. It is shown here equipped with the famous Hobart Air Whip Attachment for Cakes, Icings, Meringues and Whipped Cream.

The Hobart 20-12 **FITS** scores of needs. In many kitchens, this one Machine can serve as **COMPLETE** mixing Equipment, as no one machine ever has before. Before you decide on any Mixer—get complete information on this new Hobart.



THE HOBART MFG. CO.,
1005 Penna. Ave., Troy, Ohio

☐ O. K! More information on new Mode 20-12 Quart Mixer, please.

☐ Let's see your new illustrated Folder on the Hobart Kitchen Machines Line.

Name.....

Address.....

City.....State.....

**SOLD BY LEADING
KITCHEN OUTFITTERS**

The Effective Use of Motion Pictures

By J. A. HOLLINGER

HAD the camera been invented before the printing press, had Edison lived before Gutenberg, what differences would there be in the records of civilized peoples? How would our educational procedures differ from those of the present day? The printed page is rather drab, inartistic and frequently verbose. The motion picture, on the other hand, is usually interesting, artistic and comprehensible.

In our schools we have found four distinct uses for motion pictures. Other uses also occur occasionally.

First and most important are classroom motion pictures used as learning devices with specific purposes and definite methods of use. Sixteen-millimeter silent motion pictures in the hands of skillful teachers are effective in stimulating interest and challenging attention. They assist

learners to comprehend situations and to fix information. The Pittsburgh school district has a nucleus of a library of at least twenty reels of 16-mm. motion picture films in every school building in the district. These are always conveniently available for teachers' use in classrooms.

Second effective use of motion pictures is in regular auditorium assemblies or club meetings. Here silent or sound motion pictures of a wide range of materials supply valuable learning areas. Learners like this type of exposure. Definite objectives can be determined and motion pictures may be selected for presentation on the basis of these objectives. Such pictures as "Secrets of Success" may be used for character building.

For vicarious experiences with many geographical regions and different types of human relationships and

interdependence, use may be made of such pictures as "Port O'Call Series," "Fitzpatrick Travel Talks" and others. For science of general interest there are pictures such as "Killing to Live," "Lost Gods," "The Cosmic Drama," "Trip to Mount Everest." Mental set before the pictures is presented and some type of follow-up may be effected either in the auditorium assembly or in individual classrooms. The latter is the more effective.

A third type of school program is a short reel presented during the daily lunch period. This may be entertaining as well as instructive. Here is a splendid opportunity to build up school morale, good will and joy in school life.

The fourth type of motion picture study is on the educational fringe, but might perhaps be made as integral a part of the program of studies as classical literature. Evidence indicates that practically the entire school population goes to the motion picture theaters once a week. The school might well be interested in studying the motion picture as a cultural factor. A small beginning has been made. Motion picture appreciation clubs in high schools are a means to this end.


Some other uses of motion pictures include the following: (1) adult education; (2) special arts and crafts, such as drawing figures in action, the printing processes, proper handwriting habits and automobile mechanics; (3) proper care of books, and (4) special assembly programs when feature pictures are presented.

In our community a discussion group called the Visual Instruction Committee meets every two months for discussion of immediate problems. The papers presented are available in mimeographed form. They deal with: "Direction of the Use of Visual Aids in the High School as a Part of Its Program of Instruction"; "Administration of Visual Aids in Pittsburgh Elementary Schools"; "Administration of Visual Aids in a City School District," and "The Evaluation of Pictures."



Dr. William Lewin, chairman of the N. E. A. motion picture committee, gathers material for "A Tale of Two Cities" study guide.

ALL AROUND THE SCHOOL



BETTER LIGHTING safeguards children's eyes. Types for every need.

PUBLIC ADDRESS and Radio Distribution Systems for school use.

BELLS... BUZZERS... SIGNALS of any kind for school requirements.

THE AUDIPHONE helps the hard-of-hearing child. In single units, or in groups.

THE INTER-PHONE connects the principal's office to every room. Saves time... footsteps.

FIRE ALARMS from Graybar protect lives. Long experience assures dependability.

VENTILATING or other types of FANS for any need are available from Graybar.

HOUSEHOLD ELECTRICAL APPLIANCES have a place in up-to-date Domestic Science classes.

MOTORS and Control from Graybar are dependable and available for any power need.

WIRE AND CONDUIT—and 60,000 other Graybar items. Consult us for any electrical need.

This service of electrical supply is **ECONOMICAL-UP-TO-DATE-ALL-INCLUSIVE**

Now, more than ever, electricity plays an all-important part in the school. It safeguards the health of children... lifts burdens from hard-working teachers... increases school efficiency.

As America's oldest and largest distributor of electrical equipment, Graybar makes the benefits of electricity available *quickly... economically... reliably*. It can supply any and every school electrical requirement.

It may be electrical equipment for air-conditioning. Or a Public Address or Radio Distribution System. Or household electrical

appliances for Domestic Science courses... It may be Audiphones for Hard-of-Hearing classes or individuals. It may be correct modern lighting equipment. Fire alarms... signals... buzzers. Or motors, wire and cable.

No matter what the item, it has the backing of Graybar's long experience in meeting school needs... *Plus*

Graybar's reputation for *quality* that goes back 67 years.

Graybar

OFFICES IN 78 PRINCIPAL CITIES
EXECUTIVE OFFICES: GRAYBAR BLDG., N. Y.

NEWS IN REVIEW.....

School Buildings Were Not Seriously Damaged by Floods and Tornadoes in East and South

Fortunately for the schools both flood and tornado did relatively little damage. Six states — West Virginia, Ohio, Pennsylvania, Maryland, Massachusetts and Connecticut — were affected by floods.

According to information prepared by State Superintendent Albert S. Cook, no serious damage occurred in Maryland.

Commissioner of Education E. W. Butterfield indicated that approximately \$200,000 damage to buildings and equipment in Connecticut would be cared for through use of local funds. Flooded buildings have been cleaned and renovated and every one is already back in use.

Lester K. Ade, state superintendent of public instruction, has incomplete returns from Pennsylvania districts, but partial information indicates that the total damage was not so high as at first

imagined. The greater portion of the damage was from mud and water. While the totals will run somewhat higher than Connecticut, the amount is relatively small. West Virginia and Ohio do not yet have complete reports in the state department but, again, advance indications are that the permanent school damage was relatively slight. Massachusetts apparently suffered even less than Connecticut.

North Carolina, Georgia and Mississippi, the three states most seriously affected by tornadoes, did not suffer greatly with respect to schools. While returns from these state departments are still incomplete, there seems to be little indication that the loss was heavy. Practically all of the rehabilitation and repair work for the damage will be met from local and state funds.

Harvard Institutes New Degree for Schoolmen

The issuance of master's degrees to persons in the educational field is being revolutionized at Harvard University where a degree of master of arts in teaching has been instituted for students preparing to be secondary school teachers, while superintendents, principals and education specialists will work for the degree of master of education. For the first time in the history of the university the graduate school of arts and sciences and the graduate school of education will cooperate jointly in awarding the new degree.

In order to win a master of arts in teaching, the prospective teacher must have a comprehensive knowledge of the subject he is to teach and of the theories of education, and must serve an apprenticeship in teaching. Women will take this degree at Radcliffe. The departments of the faculty of arts and sciences will set the standards and examine the candidate's knowledge of the subject matter he proposes to teach, and the faculty of education will have charge of the study of educational material and apprentice teaching.

The minimum requirement for this

degree is one year, but the university believes most candidates will require more than a year to prepare for the tests on which the degree is based.

Students inexperienced in school work will no longer be admitted to candidacy for the degree of master of education. Both men and women are admitted to the graduate school of education for this degree and for the degree of doctor of education. The minimum period of study required for the master of education is one year, and no course credits will be required or counted under the new plan. Recommendations for the degree will depend on general final examinations and on a demonstration of competence during an apprenticeship in actual work in neighboring schools.

Educators Meet in Paterson, N. J.

An educational conference took place at the Paterson State Normal School, Paterson, N. J., when about 300 school superintendents, principals and supervising principals of North Jersey gathered. Among the speakers was Ernest A. Harding, assistant state commissioner of education, who discussed "The Elementary School Administrator as a Builder of Group Morale for Teachers."

New Scholarships at Rochester

Prize scholarships, carrying an annual maximum stipend of \$500 each, have been established by the University of Rochester, and thirty will be available to seniors in high school or preparatory schools in the United States for 1937. The committee of award will require no examinations for applicants but may ask them to take aptitude tests. The scholarships are similar to the Harvard scholarships, the regional scholarships at Yale and the Rhodes scholarships.

Safety Education Recognized

The "division of physical and health education" in the state of New Jersey has been changed by the New Jersey state board of education to "division of health, safety and physical education." This change was made to coincide with the greatly increased responsibilities in safety education charged to the state department in recent years.

Centralize Graduate Work

Since all graduate work in teachers' colleges in the state has been discontinued by the recent action of the council on higher education and centered at the University of Kentucky, the university has announced that students enrolled as candidates for a master's degree at Western State Teachers College, Eastern State Teachers College, Murray State Teachers College and Moorhead State Teachers College may transfer to the university and receive credit for the time and amount of work accomplished.

To Close Seth Low Junior College

Seth Low Junior College, Brooklyn, N. Y., a unit of Columbia University, established in Brooklyn at a time when there seemed to be a necessity for a junior college to provide preprofessional training for admission to schools of law and medicine, is to be permanently discontinued in June, 1938. The educational work of the college will be transferred to Morningside Heights.

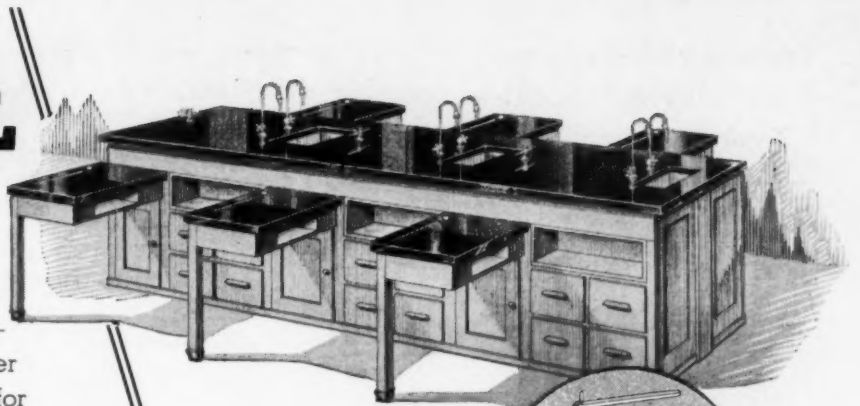
Cornell Starts De Garmo Fund

A memorial to commemorate the distinguished service of Prof. Charles De Garmo to Cornell University and American education is being established at the university by a group of alumni engaged in educational work. It is to take the form of a special book fund to be known as the De Garmo Memorial Book Fund, the income to be used for the purchase of professional books.

TRULY UNIVERSAL

—in accommodations and adaptability is this modern chemistry desk. An individual laboratory for each student—with gas, water and sink. All students face the instructor. Four-class capacity. Center section built to standing height for experiments; wings to sitting height for lectures. Extra two-student units may be added as needed. All service outlets and drains interconnected—require only one set of feeders per table. Write for complete details.

HAMILTON-INVINCIBLE, INC.
SALES AND GENERAL OFFICES—TWO RIVERS, WIS.
Authorized Representatives in Principal Cities



Universal Chemistry Table
No. 1A-450

Side wings may be equipped with upright rod and Greenlaw Arms for physics experiments.

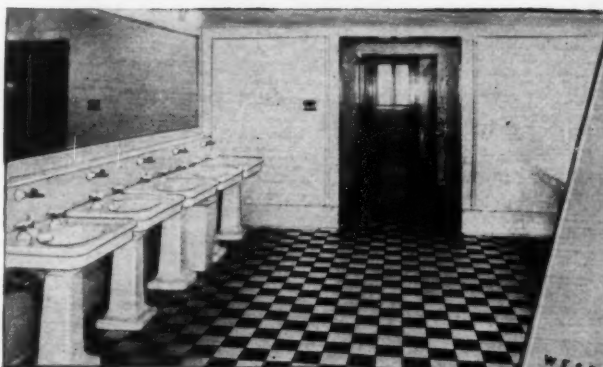


HAMILTON-INVINCIBLE

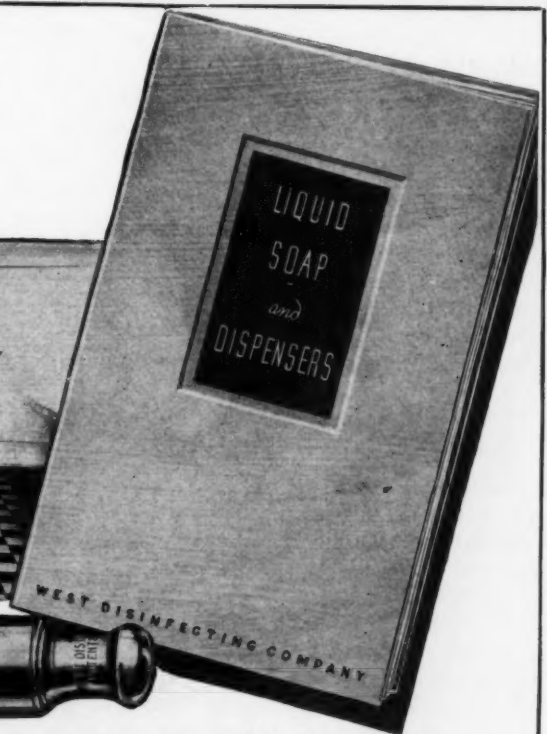
LABORATORY VOCATIONAL AND LIBRARY FURNITURE

THIS FREE BOOK MAY SOLVE YOUR SOAP PROBLEM

Liquid Soaps
Soaparatus
Dispensing Systems
Soaparatus Valves
Tanks and Fittings
Individual Dispensers



The West Latherator automatically agitates the soap into a rich, creamy lather before it leaves the valve. This saves waste and cuts soap costs in half.



WEST DISINFECTING CO.

DEPT. C., 42-16 BARN STREET—LONG ISLAND CITY—NEW YORK
THE LARGEST ORGANIZATION OF ITS KIND IN THE WORLD

Education Moves Forward at Portland N. E. A. Meeting

Planned after the manner of a summer session in education, the Portland, Ore., meeting of the National Education Association, convening from June 28 to July 2, has for its general theme, "Education Moving Forward." The program has been divided into eight general sessions, three of which will be subdivided into sectional discussions, and three business meetings.

Among the subjects to be discussed are the future policies of the teaching profession by Frederick M. Hunter, chancellor, Oregon state system of higher education; the integration of education and democracy, with John W. Studebaker, U. S. commissioner of education, and A. J. Stoddard, past president of the Department of Superintendence, as principal speakers, and the needed activities in implementing the Children's Charter, pointed out by A. L. Threlkeld, president of the department of superintendence; Effie I. Raitt, president of the American Home Economics Association; Norman F. Coleman, Reed College, and Mrs. B. F. Langworthy.

The problems of educational equality will be discussed by Willis A. Sutton, past president of the association, Anna Swenson, director, high school teacher training, Minnesota, and Howard A. Dawson, director of rural service of the N. E. A. Teacher welfare; youth problems; the movies, radio and children's literature as educational tools; new needs in elementary and secondary education; safety education; utilization of lay cooperation, and the broadening of community horizons are other subjects to be covered in the general sessions. The final session will be devoted to an evaluation of national issues, with representatives of the major political parties presenting and speaking for the platforms adopted.

Field Courses in Foreign Study

The International Institute of Teachers College, Columbia University, in cooperation with various national education authorities, has announced a series of field courses in foreign education. There will be a residence study group in Berlin; a foreign study course in the psychology of social reconstruction; field courses in the teaching of literature and in social work in England; in physical education in Sweden, Denmark and Germany; in European geography; in nursery school, kindergarten and early elementary education in Holland, Belgium, France and England; in European fine arts, and in fine arts in Mexico.

Summer School for Engineers

The fourth annual summer school for engineers and custodians of schools, apartments and other public buildings will be held by the University of Minnesota June 8 to 13. The summer training work is divided into three departments: housekeeping and sanitation; heating and ventilating; maintenance and management.

Department Plans Orient Tour

A sixty-eight-day tour of the Orient is being planned by the primary and kindergarten departments of the N. E. A. to follow the Portland convention.

Parents and Teachers to Meet

The National Congress of Parents and Teachers will discuss the relation of the home to character formation at its fortieth annual convention in Milwaukee, May 11 to 15. Two unusual features of the convention will be a tree planting in honor of Mrs. Arthur A. Birney, honorary vice president, and an international night presenting the many nationalities represented in Milwaukee.

Peabody Holds Conference of Administrative Officers

The administration of the instructional program to meet the needs of pupils will be studied by the seventh annual conference of school board members and school administrative officers at George Peabody College for Teachers, Nashville, Tenn., June 11 to 13. The program has been divided into three general themes.

"What are the needs of pupils?" will be discussed by Lucy Gage, Peabody College; Willis A. Sutton, superintendent of schools, Atlanta, Ga.; C. W. Dickinson, Jr., state department of education, Virginia; James H. Hope, state superintendent of schools, South Carolina; Dr. Paul L. Boynton, Peabody College, and Frederick Archer, superintendent of schools, Louisville, Ky.

Among those discussing the contributions of subject-matter fields to pupils' needs are Bess Goodykoontz, U. S. Office of Education, and members of the departments of English, geography, fine arts, physical education, chemistry, mathematics and library science of Peabody College. The contribution of supervision to pupils' needs will have J. C. Heatwhole, executive secretary, Virginia Education Association; Dr. J. Henry Highsmith, North Carolina; James H. Hope; C. W. Dickinson, and Willis A. Sutton for speakers.

N. Y. C. Schools Study Peace

Peace education is being introduced into the schools of New York City under a program devised by Supt. Harold G. Campbell. Mr. Campbell, in announcing the program, writes: "Such instruction does not mean the teaching of pacifism or nonresistance. . . . It does not mean that our pupils shall forget that they and their parents are enjoying the full advantages of American citizenship because our forefathers held some things dearer than life itself. . . . Peace education does mean that we should instill into the minds of pupils ideas of the brotherhood of man, respect for the institutions, manners and customs of other peoples as well as for our own institutions, manner and customs, and an appreciation of the sanctity of human life, regardless of race or creed."

CCC Educational Program

The educational program, launched in the Civilian Conservation Corps in January, 1934, now has 1,900 educational advisers on duty in the camps. Among the camp members about 275,000 are studying courses of instruction: 9,169 are being taught to read and write; 50,000 are making up common school deficiencies; 229,146 are taking vocational training; 101,584 are studying high school subjects, and 7,078 are doing college work.

City Superintendents Organize

One hundred and eight school superintendents recently attended the first annual conference of city school superintendents held under the joint auspices of C. A. Howard, superintendent of public instruction, and the city superintendents' division of the O. S. T. A.

N. E. A. Rides the Red Rider

The National Education Association devoted fifteen minutes on the evening of March 25 to the broadcast of a humorous skit depicting the possible results of gag rule as enforced by the red rider, that statement tacked on the end of the District of Columbia Appropriation Bill passed by Congress in June, 1935. The red rider reads: "Hereafter no part of any appropriation for the public schools shall be available for the payment of the salary of any person teaching or advocating communism." Karl Schriftgiesser, reviewing the program in the *Washington Post* said: "The National Education Association's broadcast was by far the most effective of several national efforts to aid the repeal of the little red rider."

Make Your Own Combinations to Fit Your Own School Library

No matter what space is available, there is an attractive and practical arrangement to suit your own school library requirements by using standard units from the GUNN LIBRARY FURNITURE LINE.

The case illustrated provides magazine shelves, twelve compartments for storing back numbers of magazines, and five newspaper holders. Magazine shelves have retaining rims and $\frac{1}{2}$ in. adjustments with improved metal supports set into the standards.

By combining special units of similar type with the required number of GUNN-WAY shelving sections you can provide a methodical and pleasing arrangement. Because of varying lengths and heights, GUNN-WAY SHELVING adapts itself to any wall space—next to fireplaces—under windows—along staircases—and around corners.

Our Designing Department will prepare complete floor plans, to serve your needs effectively and economically. This service places you under no obligation.



GUNN FURNITURE CO.

GRAND RAPIDS
MICHIGAN
Established 1889

PPROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

HYNSON, WESTCOTT & DUNNING, INC.
Baltimore, Maryland



After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

MERCUROCHROME, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

PRIVATE SCHOOLS

Westtown to Remodel Old

Stone Barn for Class Use

The old stone barn on "The Lane" is being remodeled into an elementary school building at the Westtown School, Westtown, Pa. It will include three classrooms, with a fireplace in the first grade room, a locker room and showers and a teachers' lounge. Architecturally the building will correspond to the colonial lines of the other buildings on the campus.

The contractor in charge of the remodeling is a graduate of the school, and insofar as possible the boys in the upper school will be allowed to assist the carpenters and masons as a part of their shop work.

Westtown School no longer restricts its enrollment to Friends.

Canterbury Suffers Fire Loss

Fire that started in the northeast wing destroyed the main house of Canterbury School, New Milford, Conn., and cost the life of a housekeeper. The three-story building included an office, library, classrooms on the first floor, a dormitory for the younger pupils on the second floor and an infirmary on the third. The financial loss was estimated at \$100,000. Pupils at Canterbury were absent from the school for the spring vacation. Dr. Nelson Hume, headmaster, states that pupils who lived in the destroyed building are being housed temporarily in the gymnasium, chapel and infirmary.

N. A. P. S. G. Elects Alice Howland

Alice G. Howland, co-principal of the Shipley School, Bryn Mawr, Pa., was recently elected president, for a two-year term, of the National Association of Principals of Schools for Girls.

Amateur Show at Governor Dummer

Amateur shows began their invasion of the school world with a highly successful program put on by the pupils at Governor Dummer, South Byfield, Mass. Fifty boys participated in the entertainment, with one acting as master of ceremonies. First, second and third prizes were awarded for applause, individual performance and originality. Amateur Night may become an annual affair at the academy.

New Head at Miss Fine's School

Katherine Shippen has been appointed headmistress of Miss Fine's School, Princeton, N. J., to succeed Mrs. Edward M. Earle. Mrs. Earle has been headmistress for two years and will continue for the remainder of the academic term. Miss Shippen, who will assume her duties next fall, has been a member of the faculty of the Brearley School, New York City, for six years.

Cadets Police Stricken Town

Cadets at the Riverside Military Academy, Gainesville, Ga., were given their first taste of martial law, when, following the tornado that laid Gainesville waste and killed and injured hundreds of persons, they were called upon to police the town. Under the direction of Col. Sandy Beaver, headmaster, the boys directed traffic, prevented persons from crowding into the dangerous sectors and aided generally in the rescue work. The school infirmary was made a temporary hospital base for the care of the injured, later moved to Atlanta.

Pupils Publish Facts

on Cranbrook School

"Facts" is an attractive, thirty-six-page booklet designed and printed by the pupils of Cranbrook School, Bloomfield Hills, Mich., for the information of Cranbrook parents, alumni and friends. Published as a limited, numbered edition, the cover of the book is of heavy dark blue paper, banded at top and bottom with silver.

The facts, themselves, are set forth on a gray enamel paper, printed in blue ink, with the use of red, green, yellow, gold and silver as well as blue in the clear, illustrative diagrams and maps that liberally illustrate the book.

The volume contains a map of the school, plans of the school's buildings, a pupil directory and a staff directory, a time study of scheduled activities and of extracurricular activities, and outlines of supplementary activities in such special departments as arts and crafts, science, music and dramatics.

Heads Abbot Academy

Marguerite Hearsey has been made principal of Abbot Academy, Andover, Mass. Miss Hearsey has been acting as dean and professor of English at Hollins College.

Coming Meetings

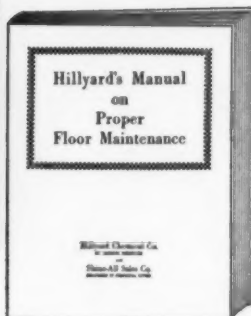
May 1-4—American Association on Mental Deficiency, St. Louis.
May 1-2—Association of University and College Business Officials, Fayetteville, Ark.
May 4-6—Institute of Education by Radio, Columbus, Ohio.
May 8—American Council on Education, Washington, D. C.
May 8-9—Progressive Education Association, Regional Conference, Buffalo, N. Y.
May 11-13—National Congress of Parents and Teachers, Milwaukee, Wis.
May 18-21—American Association for Adult Education, New York City.
June 3-4—Indiana County Superintendents' Association, Indianapolis.
June 11-13—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.
June 15-20—National Association of Engineers and Custodians, Evansville, Ind.
June 16-18—Conference on Child Development and Parent Education, University of Iowa.
June 22-25—National Conference of Visual Education and Film Exhibition, Chicago.
June 25-26—Conference on Business Education, Chicago.
June 28-July 2—National Education Association, Portland, Ore.
July 6-17—Department of Elementary School Principals, National Education Association, Portland, Ore.
July 6-9—American Home Economics Association, Seattle, Wash.
July 28-30—Superintendents' Conference, Pennsylvania State College.
Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.
Oct. 7-9—New Hampshire State Teachers Association, Littleton.
Oct. 8-10—Vermont State Teachers Association, Burlington.
Oct. 12-16—National Association of Public School Business Officials, St. Louis.

Oct. 15-17—Wyoming Education Association, Laramie.
Oct. 22-24—Rhode Island Institute of Instruction, Providence.
Oct. 22-23—Indiana State Teachers' Association, Indianapolis.
Oct. 22-24—Mississippi Education Association, Jackson.
Oct. 23-24—Maryland State Teachers' Association, Baltimore.
Oct. 29-30—Maine Teachers' Association, Lewiston.
Oct. 29-31—Montana Education Association, simultaneous meetings at Helena, Kalispell, Great Falls and Billings.
Oct. 30—Connecticut State Teachers Association, Hartford.
Nov. 4-6—North Dakota Education Association, Grand Forks.
Nov. 5-7—Colorado Education Association, simultaneous meetings at Denver, Pueblo and Grand Junction.
Nov. 5-7—Iowa State Teachers Association, Des Moines.
Nov. 5-7—Minnesota Education Association, St. Paul.
Nov. 6-7—Kansas State Teachers Association, simultaneous meetings at Topeka, Salina, Hays, Garden City, Hutchinson, Winfield, Coffeyville and Fort Scott.
Nov. 9, week of—Delaware State Education Association, Wilmington.
Nov. 11-14—Missouri State Teachers Association, Kansas City.
Nov. 12-14—Arizona State Education Association, Tucson.
Nov. 12-14—West Virginia State Education Association, Huntington.
Nov. 13-16—New Jersey State Teachers' Association, Atlantic City.
Nov. 22-25—South Dakota Education Association, Rapid City.
Nov. 26-28—Texas State Teachers Association, Fort Worth.
Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg.

Use Hillyard

QUALITY PRODUCTS

When you recondition your school this Spring



FREE...

Two valuable books just off the press. Full of real information on the proper, economical method of school maintenance. Write today for your copy.

There is a Hillyard Maintenance Engineer in your community ready to give you valuable information on service and materials that will help you lower your maintenance costs during the coming school year. Thousands of Schools, Universities and Colleges have materially reduced their maintenance costs after consulting a Hillyard Maintenance Engineer, his advice and recommendations are yours for the asking... no obligation on your part. Write today for the free books and the name of our Service Engineer in your community.

HILLYARD CHEMICAL COMPANY

BRANCHES IN
PRINCIPAL CITIES

**ST. JOSEPH,
MISSOURI**

**SHINE-ALL SALES CO.
DISTRIBUTORS**

FEDERAL SIGNALS and SIRENS

used in Nations' Schools to Protect Lives and Property



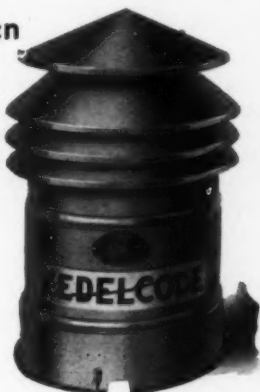
TYPE "A" STANDARD
A penetrating signal

■ Federal Type "A" Siren

School executives are realizing the importance of protecting school children and property with efficient FIRE ALARM and Signal Sirens. Federal Type "A" Standard is most popular because it can be heard above all other noises. Economical... rugged in construction... weatherproof... no gears or vibrating parts... takes the place of obsolete bells or gongs. Used in schools... public buildings. Order one today or inquire about complete fire alarm systems and start and stop signals.

Fedelcode No. 1 Siren

The Fedelcode No. 1 Siren is the latest model vertical type ball bearing motor. The specially designed hood and rotor widely distributes sound uniformly in all directions. Entirely weatherproof... can be heard for a mile... a signal for all purposes. Weight 70 lbs. Height 20 inches. Width 17 inches. Federal Engineers at your service.



Ask about tryout offer and specifications.

FEDERAL ELECTRIC COMPANY

8763 So. State St.

Chicago, Illinois



The Wayne

GYMSTAND

installed in the Glenn H. Curtiss Memorial High School, Hammondsport, New York. This grandstand folds back against the wall instantly clearing gym for class work.

...

WAYNE IRON WORKS

100 N. School St., Wayne, Pa.

Wild West Film Produced by Doylestown Pupils

Armed with a burlesqued wild west scenario and a 16-mm. camera, the photoplay appreciation class of Doylestown High School, Doylestown, Pa., recently undertook the production of a motion picture of their own. The sure fire story centered about a lovelorn heroine, a villain who tied her to the railroad tracks, and a hero who arrived in the nick of time.

Sets consisted of a farm, a denuded buggy, a watch tower and the railroad tracks. After experimenting, the class decided that daylight was best for outdoor scenes, and discovered that the 16-mm. camera was capable of taking almost all types of shots in a modified form. The scenario was written with dialogue, but after it was discovered that voices could be heard only by those sitting closest to the phonograph, sound effects were discarded.

According to Margaret Kidder Lehman, head of the English department at the school, the two-reel movie was not a work of art. However, she writes, in the *Motion Picture and the Family*, it achieved results. "It gave a group of average high school youngsters the thrill of creating something which was theirs alone. They learned the difficulties attached to artistic photography and the time and skill required in all phases of even so small an attempt as this one. They made gross errors, but their respect for artistry in all forms of movie production is unbounded." The club is now planning to try color photography, using subtitles to achieve continuity.

New Film Directory Out

The spring issue of "Motion Pictures of the World," a directory of educational films, is now ready for distribution. Thoroughly revised and brought up to date, the directory gives factual descriptions of about 100 words each on the films listed and the cities from which each film may be obtained with rental rates. Among the 2,000 films listed are the Burton Holmes and Fitz-Patrick travelogues, Eastman Teaching Films, Bray educational subjects, and series made by universities and museums. Specifications are given as to film width, silent or sound, and number of reels. The average cost of the rental films is \$1.25 a reel for 16 mm. and \$2.50 a reel for 35 mm. silent. Sound films run slightly higher. Two hundred films listed are lent without charge to directory subscribers and 200 for a booking fee of \$0.25 per reel. The directory is published by International Educational Pictures.

Educational Films Compulsory

An educational film will be shown in motion picture theaters in Turkey along with every feature film, if the law under discussion by the Grand National Assembly is passed. According to newspaper reports, educational and technical films as well as trucks carrying sound installations will be allowed to enter Turkey free of duty if they are imported by official administrations. Individuals and private organizations will be exempt from customs duty when the educational value of the films is definitely established by a committee.

Indian and Eskimo Series

"The Silent Enemy," produced by William Douglas Burden of the American Museum of Natural History and "Nanook of the North," produced by Robert Flaherty, have been made into 16-mm. school subjects by H. Threlkeld-Edwards, New York City. Three one-reel episodes for third and fourth grade pupils on the life of Cheeka, an Indian boy, and four subjects on Indian tribal customs and village life for upper

grades compose the North American Indian Life Series, which is based on "The Silent Enemy." The Eskimo Life Series, based on "Nanook of the North," consists of four one-reel episodes prepared for third and fourth grades. The six-reel feature productions of these films are also available in 16-mm. size.

Leaves and Flies Filmed

"Leaves" and "The House Fly" are two educational films that are now being released by Erpi Picture Consultants, Inc. The first is the study of the functions of the leaf as a food factory, with effects secured through microphotography and animated drawings. The second combines biological science and health aspects in the study of the life cycle and habits of the fly.

Fire Prevention Is Film Theme

An interesting film on fire prevention called "The Bad Master" has just been released by the Aetna Life Insurance Company and two of its affiliates. It is available in both 16-mm. and 35-mm. width, both silent and sound.

Films for the School Screen

IX—Holland

The Little Dutch Tulip Girl—Tom, a little American boy, falls asleep and dreams that he is wandering through Holland with Katrina, a little girl of Volendam. Katrina shows Tom The Hague, the art of tree clipping in Aalsmeer, the town of Leiden, the Isle of Marken and the famous tulip and cheese industries of the Netherlands. She shows him how Dutch children live and play, what their schools are like and explains why dikes have to be built in Holland. 1 reel. 16 mm. and 35 mm., silent. For rent or purchase. Films of Commerce Co., Inc., 35 West 45th Street, New York City.

Beside the Zuider Zee—Scenes in the village of Volendam. 1 reel. 16 mm. and 35 mm., silent. For rent or purchase. Society for Visual Education, 327 South LaSalle Street, Chicago.

Holland and the Dutch—Amsterdam, the Royal Palace, diamond cutters, Volendam, Alkmaar, Isle of Marken. 1 reel. 16 mm., silent or sound. For rent or purchase. Burton Holmes Films, Inc., 7510 North Ashland Avenue, Chicago.

Holland—Picturesque Scenes and Customs—Life of the native inhabitants. 1 reel. 16 mm. and 35 mm., silent. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Holland—Intimate glimpses of the land of dikes and wooden shoes. 1 reel. 16 mm., silent. For rent or purchase. Institutional Cinema Service, Inc., 130 West 46th Street, New York City.

Holland in Tulip Time—Quaint beauty and picturesque customs; tulip industry. 35 mm., sound. For rent or purchase. 1 reel. Metro-Goldwyn-Mayer, 1540 Broadway, New York City.

Stroll Through Holland—Travelogue explained by a native. 1 reel. 16 mm., sound. For rent or purchase. Nu-Art Filmco, 130 West 46th Street, New York City.

The Netherlands and Its People—Comprehensive study of the country—its people, industries and life in general. 5 reels. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Going to Volendam—Holland's water highway and boats; Volendam and its people. 1/2 reel. 16 mm., silent or sound. For rent or purchase. Burton Holmes Films, Inc., 7510 North Ashland Avenue, Chicago.

Holland—Dikes, canals and spotless towns. Quaint costumes and native scenes. 1 reel. 16 mm., silent. For rent or purchase. Edited Pictures System, Inc., 330 West 42d Street, New York City.

In Rumania



Elementary
School
BUCHAREST



A fine school is first dependent upon good teachers—secondly, on comfort in temperature and seating.

Royal

"THE FINEST SINCE '97"

Write for catalog of
MODERN SCHOOL SEATING
for
MODERN AMERICAN SCHOOLS

ROYAL METAL MFG. CO., 1134 So. Michigan Ave., CHICAGO — Also New York and Los Angeles

On the Air During May

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Standard except when otherwise specified.

Daily

National Farm and Home Hour¹—12:30-1:30 p.m. (NBC-WJZ).
Wilderness Road²—5:15-5:30 p.m. (CBS).

Monday

American Education Forum—2:00-2:30 p.m. (NBC-WEAF).
Answer Me This. (Self-tests in the social sciences behind the news, Office of Education)—6:35 p.m. (NBC-WEAF).
Education in the News, Office of Education—7:30-7:45 p.m. (NBC-WEAF).
May 11—Address at the convention of James Tate Mason, M.D., president, American Medical Association—5:30-5:45 p.m. (NBC-WJZ).
May 11—Interview with distinguished foreign visitors at A. M. A. convention, Morris Fishbein, M.D., editor, *Journal of the American Medical Association*—2:30-2:45 p.m. (CBS).

Tuesday

Your Child, Dr. Ella Oppenheimer, Children's Bureau, U. S. Department of Labor—11:15-11:30 a.m. (NBC-WEAF).
Science Service Series, Watson Davis, Editor—4:30-4:45 p.m. (CBS).
Medical Emergencies and How They Are Met, dramatized program with incidental music, American Medical Association—5:00-5:30 p.m. (NBC-WEAF).
May 5—Maternal Care, W. W. Bauer, M.D., director, bureau of health and public instruction, American Medical Association.
May 12—Medicine Marching Forward, W. W. Bauer, M.D.
You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).
May 5—Regional Governments for Regional Problems, William B. Munro, professor of history and government, California Institute of Technology.
May 12—The Constitution and Social Security, John G. Winant, chairman, Social Security Board.
May 19—The Rights Reserved to the States and the People, William L. Ransom, president, American Bar Association.
May 26—The Delegation of Powers, John Dickinson, Assistant Attorney General of the United States.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).
May 6—Delinquency and Its Control, William Healy, M.D., director, Judge Baker Guidance Center, Boston.
May 13—The Youth Movement, Dr. Frank O. Holt, dean, extension department, University of Wisconsin.
May 20—What of the Rural Child? Agnes Samuelson, president, National Education Association.

May 27—Rest and Sleep of Young Children, Rose H. Alschuler, adviser, emergency nursery schools, board of education, Chicago.

Our American Schools, directed by Belmont Farley—7:45-8:00 p.m. (NBC-WEAF).
The Cavalcade of America, dramatization of significant moments in American History—8:00-8:30 p.m. (CBS-WABC).

May 13—Interview on the scientific exhibit at A. M. A. convention, Morris Fishbein, M.D., editor, *Journal of the American Medical Association*—1:00-1:15 p.m. (NBC-WJZ).

Thursday

Music Appreciation Series, Standard School Broadcasts, 11:00 a.m.-12:20 p.m. (elementary); 11:25-11:45 a.m. (NBC).
Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).
America's Town Meetings—9:30 (NBC-WJZ).

Friday

Vocational Guidance and Current Events Series—2:30-3:00 p.m. (CBS).
May 1—You Are Responsible for Making Your Own Decisions.
Magic of Speech—2:00-3:00 p.m. (NBC-WEAF).
General Federation of Women's Clubs Series—2:45-3:00 p.m. (NBC-WJZ).
May 15—News broadcast, outlining the main events of American Medical Association convention, W. W. Bauer, M.D.—3:00-3:15 p.m. (CBS).
Medicine, Yesterday and Today, 9:45-10:15 p.m. (CBS).
Have You Heard? (Introductions to fascinating corners of natural science.) 6:35 p.m. (NBC-WJZ).

Saturday

Our American Schools, directed by Florence Hale—11:00-11:15 a.m. (NBC-WEAF).
Cincinnati Conservatory of Music—11:00 a.m.-12 m. (CBS).
Symphony Orchestra of the Carnegie Institute of Technology—2:30-3:00 p.m. (NBC-WEAF).
Boston Symphony Orchestra—8:15-9:10 p.m. (NBC-WJZ).

Sunday

University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).
Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m. (CBS).
Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).
General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).

¹Except Sunday.

²Except Saturday and Sunday.

³Pacific Coast stations only.

Institute to Study Script Writing and Broadcasting

The seventh annual institute for education by radio, which brings together representatives of educational and commercial broadcasting stations, chains, colleges and universities and government agencies concerned with radio, is being held at Ohio State University, May 4 to 6. Since, in the opinion of institute leaders, education by radio has established its value, this institute will be devoted to the techniques of educational broadcasting, with clinics on script writing and broadcasting.

An analysis of educational broadcasting will be presented at the opening meeting by W. W. Charters, Ohio State University, with comments by Carl Menzer, WSUI, State University of Iowa; Lester Ward Parker, Rochester, N. Y.; S. Howard Evans, National Committee on Education by Radio, and Cline Koon, U. S. Office of Education. Objectives in program planning will be discussed by A. G. Woolfries, WOI, Iowa State College, and Philo M. Buck, University of Wisconsin.

Taking part in the script-writing clinic are E. R. Murrow, CBS; Arthur Garbett, NBC; Irene Wicker, "The Singing Lady," NBC; H. V. Kaltenborn, CBS; Arthur Jersild, CBS, and Meredith Page, Ohio State University. C. L. Menser, NBC; W. I. Griffith, WOI; Kenneth Bartlett, Syracuse University, and Kathleen Goldsmith, Radio Institute of the Audible Arts, are taking part in the clinic on broadcasting technique. Demonstrations of classroom reception of a radio program and of adult group discussion of an educational program will be given at the final session.

Radio Project to Assist Schools

The recently organized Educational Radio Project of the Office of Education expects to offer assistance to school officials with radio problems, possibly taking the form of scripts for use on local stations. The project is also considering the preparation of a series of records to demonstrate radio techniques in writing, casting, use of music and directing. These would be lent to high school and college dramatic or radio groups working up programs for the air.

High School Alumni Broadcast

What is thought to be the first high school alumni choir ever organized in the United States is Bedford Alumni Choir, Bedford, Ohio, which recently broadcast over the Columbia Broadcasting System's network.

Europe Broadcasts News in English Over Short Wave

High powered radio stations in France, Germany, Holland, Italy, Belgium, Spain and England are now broadcasting daily news reports to the United States that offer interesting opportunities for supplementary study to pupils and teachers who use short wave receiving sets.

Twenty-four news broadcasts in the English language are given every twenty-

four hours from London, Paris, Berlin, Rome, Madrid and Brussels, giving a daily first hand account of history making events. These broadcasts are also translated into German, French, Italian, Spanish, Dutch, Arabic, Flemish and Portuguese by commentators and announcers whose diction and enunciation are proficient.

Time tables of these broadcasts may be obtained from the Short Wave Institute of America, National Press Building, Washington, D. C.

HEALTH TEACHING that gets into the EYES and SPINE



... is there to stay!

The success of your health program depends in large measure on pupils habitually doing what their lessons teach them is best for their health.

When you seat them in the American Universal Better-Sight Desk, you make it possible for them to sit *naturally* and *continually* as they *should* to protect their eyes and health. This is health teaching that is not left to chance . . . health teaching that is there to stay.

Classroom posture posters and interesting pamphlets relating to healthful posture and eye-protection are available for teachers' use. Address Dept. NS 5.



The American Universal Better-Sight Desk
Accepted by the Council on Physical Therapy
of the American Medical Association

AMERICAN SEATING COMPANY



*Makers of Dependable Seating for Schools,
Churches and Public Auditoriums*

General Offices: GRAND RAPIDS, MICHIGAN
DISTRIBUTING BRANCHES IN ALL TRADE AREAS

PAGE FENCE

PIONEERS WITH A
New LINE POST



*"You'd
expect it
of Page!"*

PAGE refuses to let "well enough" alone—is striving constantly to raise the standard of fence construction. Heretofore, fence posts have been adaptations of existing sections. Now PAGE announces the *new* wing channel line Post designed especially for fence and fence alone, with many advantages resulting—superior galvanizing, greater strength, a far neater, more serviceable installation.

PAGE is recognized as the pioneer in the fence industry. PAGE was America's first wire fence. Since no metal is suitable for all fence conditions, we pioneered in offering fence in a variety of metals—PAGE-ARMCO Ingot Iron, PAGE "ALCOA" Aluminum, PAGE Allegheny Stainless Steel, PAGE Copper-Bearing Steel, PAGE genuine Wrought Iron.

Located conveniently throughout the United States are 92 Page Fence Distributors who will gladly consult with you, without obligation, in best solving your fencing problem. They are prepared to recommend impartially the particular metal that will give you the best service and to assume full responsibility for proper installation.

Write to any one of the offices shown below for helpful literature and name of the Page Fence expert nearest you.



PAGE FENCE ASSOCIATION
BRIDGEPORT, CONNECTICUT

New York Pittsburgh Atlanta Chicago San Francisco

This Label . . . Your Guarantee

The PAGE P-12 label identifies PAGE galvanizing which is guaranteed to withstand a minimum of 12 one-minute dips by the Preece Test. PAGE P-12 galvanizing applies not only to fence fabric but also to posts, top rail and fittings as well—your guarantee of maximum resistance to rust.

AMERICA'S FIRST WIRE FENCE . . . SINCE 1883

REGIONAL NEWS

Eastern States

NEW JERSEY

Newark. — A manual training teacher is being sued for \$10,000 by the parents of a boy injured in his classroom. It is impossible for the parents to sue the board of education because it is exempted from liability under a law passed three years ago. The executive committee of the New Jersey State Teachers' Association is studying the situation and will endeavor to have corrective legislation passed.

Trenton. — Drastic cuts have been made in the school budget, both by the board of education and the board of school estimate, which will result in the curtailment of supervision, the elimination of summer schools and the possible elimination of evening schools. The budget has been reduced to \$1,745,065.10, which is \$189,860.32 less than in 1935-1936. This is the first school budget to be made in Trenton under the city manager form of government.

NEW YORK

Bayside. — Approximately 2,300 pupils who have been attending the Flushing High School are now housed in the new Bayside High School, erected as a PWA project at a cost of \$2,500,000. The school can accommodate 4,000 pupils. It was designed by W. G. Martin, superintendent of school buildings, Brooklyn.

Hogansburg. — Indians residing on the St. Regis Reservation are opposing the erection of a centralized Indian school here, asking that instead, when the present building is destroyed, eight small grade schools be built throughout the six-mile square reservation, similar to the system maintained before the erection of the present school. The Indians point out that many homes are built on little used roads, and that the children in going to the centralized school would be forced to walk long distances to reach an improved road on which a bus could travel.

Hudson. — The city recently lost its legal fight to restrain the board of education from proceeding with the erection of a new high school. In its effort to prevent construction, the city relied upon two charges: (1) the alleged invalidity of the report and notice of the Common Council in connection with calling a special election to vote on the project, and (2) the alleged invalidity of the \$275,000 bond issue on the grounds that such issuance exceeded the debt limits of the city. The court's

decision was to the effect that the city had not reached its constitutional debt limit and that the board's acts were within the express power of its charter.

New York City. — An experimental elementary school for a limited number of both bright and slow normal children has been organized in what was formerly the Speyer School. It is now known as P. S. 500, Manhattan, with Lucie Anna Petri as assistant to the principal in charge.

Syracuse. — A three-day conference on administration and educational and vocational guidance is being held at Syracuse University July 23-25.

PENNSYLVANIA

Altoona. — The consolidation of seven one-room schools and one two-room school with a total enrollment of 320 pupils will be completed when the Taylor Township School, now under construction on the highway between Roaring Spring and Martinsburg, is opened next semester.

Columbia. — A twenty-five-acre plot of ground to be used as an athletic field was given to the school district by David L. Glatfelter, president of the board of education, in memory of his son. The school board appropriated \$10,000 for materials to improve the field and voted to apply for \$200,000 in federal funds. The plans for the development of the field call for two concrete grand stands, football and baseball fields, running track and tennis courts.

Pen Argyl. — Excessive snows and rains flooded the basement of the McKinley School with water to a height of eight inches before an electric pump was installed to prevent the furnaces from being damaged.

Waynesboro. — In an endeavor to secure the permission of the board for the school band to enter state finals if it again wins the sectional meet, the auxiliary promised that individual insurance would be taken out on each pupil, that reliable chaperons would be in charge of the group, that the trip would be made by bus or train, and that the parents of each band member would sign a paper releasing the school district from responsibility in case of accident.

Wilkes Barre. — Coughlin High School and Union School were closed during the high water, but according to Supt. Allen E. Bacon, the flood cost the school district but little, chiefly because of the

preparations made for it by the supervisor of buildings, C. P. Shoemaker.

Middle Western States

INDIANA

Indianapolis. — A new minimum wage law for Indiana teachers is going into effect on August 1. The law provides a minimum compensation for beginning teachers with seventy-two weeks of professional training of \$100 per month for a minimum term of eight months. The sum of \$2.50 a month will be added for each year of teaching experience up to and including the fourth additional year, and \$2.50 a month will be added for each eighteen weeks of additional professional training until the teacher has earned 144 weeks of professional training. The minimum compensation of beginning high school teachers will be \$125 per month for a minimum term of eight months, with \$2.50 a month added for each year up to the fourth additional year.

IOWA

Davenport. — As a result of a ruling made last year by the school board, sixteen married teachers are quitting their positions in June, according to newspaper reports.

Grundy Center. — Two rural school districts of Grundy County are making no school levy this year because of the amount of money they have received from closed banks.

KANSAS

St. John. — A special experiment is being conducted in the high school on speech skills, and a speech clinic is being planned for inclusion in the curriculum next fall.

MINNESOTA

Hallock. — Ray H. Witt, principal, recently completed a study, "Progressive Practices of Minnesota Teachers," for which he reached 1,400 teachers. The study revealed that the formal mechanical use of the textbook is prevalent. Teachers with from seven to nine years of experience were found to be the most progressive, while those with from four to six are the least. Fifty per cent of the teachers use a part of the class period for supervised study, and diagnostic remedial instruction is used as a regular procedure by one-third of the teachers in both grade and high schools.

Minneapolis. — The board of education has authorized the purchase of a new diploma, a sheet, 5 by 8 inches, inserted in a suede book cover, the color of the cover conforming with the colors of the various schools. . . . First aid as a required subject has been introduced into the ninth grade as a part of the physical education program.

Thief River Falls. — Salary increases of



Many Highly Desirable Features Recommend the Selection of this IRWIN Desk Set!

This New Irwin Desk Unit No. 2523 is bound to find favor in the eyes of practically every exponent of the stationary type desk—note these salient features.

- *Quick, easy adjustability of both desk and chair promotes perfect posture.*
- *Individual pedestals entirely eliminate annoyance to occupant occasioned by the movement of other pupils.*
- *Flat, smooth bases greatly aid the janitor in keeping the floor neat and tidy.*
- *May be had with lifting lid or open box; also with straight or sloping study top.*

Write for your copy of our new seating catalog. In it you will find exactly the type of seating that circumstances and good judgment indicate as most suitable for your particular classroom and auditorium needs—all built in that quality manner for which IRWIN is nationally known.

IRWIN SEATING COMPANY

GRAND RAPIDS, MICHIGAN

Seating Specialists for Over a Quarter Century

New York Office, 381 Fourth Ave. Territorial Distributors
Throughout U. S. A.



STUDENTS
CAN THINK IN
THIS *Quiet*
NU-WOOD SCHOOL LIBRARY

Amazing—the quiet that Nu-Wood brings to school classrooms, libraries and auditoriums. Gone are distracting inside noises and unwelcome sounds from the outside.

If Nu-Wood did nothing more, it would be worth its cost. But it performs two other essential functions. It decorates with soft, glowing colors in a variety of patterns. It makes frequent decoration expense unnecessary. It is an efficient insulating material, assuring lower fuel bills and greater comfort. And, of course, it is permanent—needing only occasional cleaning to keep it fresh and new.

Nu-Wood is remarkably low in cost . . . it fits into the modest school budget. Investigate its possibilities—the facts are yours, for the asking, from your nearest Nu-Wood dealer or from us.

In the schoolroom above, Nu-Wood Tile above the wall panels creates outstanding attractiveness at low cost.



NU-WOOD

MADE BY THE MAKERS OF  BALSAM-WOOD

WOOD CONVERSION COMPANY

Room 151, First National Bank Building,
St. Paul, Minn.

I want to know more about Nu-Wood.
Please send me, without obligation on
my part, information and illustrations.

Name _____

Address _____

City _____ State _____

\$5 a month were given to the public school teachers, who were all reelected for 1936-1937. Similar increases were given here a year ago.

NEBRASKA

Hastings.—Adams County has placed forty-four pianos in rural schools during the year.

OHIO

East Cleveland.—A 115 per cent tax collection provided a surplus of \$20,000, which will be used to give a \$10 a month raise to the teachers.

Lisbon.—A resolution recently approved by the school board calls for the retirement of teachers at the age of sixty or at the end of thirty-six years of teaching.

Youngstown.—Life insurance will be studied next year as part of the economics and civics work in the high schools. The plan of study, which will be almost entirely supplementary reading, was developed by Supt. George Roudebush and the Youngstown Life Underwriters' Association.

WISCONSIN

Menasha.—A loss of \$250,000 was suffered when the forty-year-old high school was entirely destroyed by fire, which presumably started from a short circuit. An additional loss of personal effects of the teaching staff amounted to about \$5,000.

Western States

CALIFORNIA

Bakersfield.—A sunshine school, complete with a clinic, rest rooms and showers, is being designed for erection on the grounds of the Lincoln School at a cost of \$20,000.

Monrovia.—In celebration of the fiftieth anniversary of the founding of this city, the Southern California High School Symphony Orchestra, organized among the pupils of twenty high schools two years ago, will be assembled to give a concert at the Monrovia-Arcadia-Duarte High School.

OKLAHOMA

Fox.—Fires on two successive nights destroyed the \$7,000 gymnasium and the \$26,000 grade school here. It is thought that sparks from the gymnasium, which burned the first night, might have caused the destruction of the grade school building, which was 60 yards away.

Hobart.—Each school in Kiowa County has been issued a loose leaf sheet, newspaper size, by the county superintendent on which clippings, programs, pictures or anything else of interest referring to the school are to be mounted. At the close of the school year the sheet is to be returned to the office of the superintendent where it will be filed as a part of the history of the school.

Oklahoma City.—A suit asking for the restoration of \$103,475 cut from teachers' salaries in 1932-1933 has been started in the district court. The suit alleges that teachers are due that amount as the board issued contracts in May, 1932, and did not announce the cuts until the end of the school year in violation of the contracts and without the consent of the teachers.

OREGON

Monmouth.—The annual educational exposition day, long a feature at the Oregon Normal School, was held Saturday, April 25. Approximately 1,000 Oregon teachers attended.

Portland.—With the exception of the queen and her princesses, who will be selected from among the high schools, the pupils of the public school system will not take part in the annual Rose Festival of this city. The board of education decided to refuse participation to the pupils following a communication asking that such a step be taken, and a statement from Dr. Helen Cary, medical director of the schools, to the effect that participation in the various parades, dances and athletic events of the civic observance is usually detrimental to the health of the children. . . .

A conference on elementary education has been announced by the University of Oregon to follow the N. E. A. convention. It will be conducted by the extension center of the university and is sponsored by the Department of Elementary School Principals.

TEXAS

El Paso.—As a result of a report made to the board of education by architects to the effect that the floor of the San Jacinto School was sagging badly, and a further statement from the president of the board stating that teachers have become dizzy from the peculiar angle of the floor, the board ordered a thorough study made of the condition of the floor.

Fort Worth.—A junior employment service in connection with the Texas Employment Service and the U. S. Employment Service has been launched in connection with the Vocational High School to aid pupils to obtain jobs in keeping with their training and ability.

Alaska

Fairbanks.—Every member of the graduating class at the University of Alaska, America's northernmost university, helped in putting himself through college, according to Dr. Charles E. Bunnell, president, and every graduate has a position waiting when he receives his diploma. The University of Alaska is one of the sixty-nine land-grant col-

leges and universities and receives federal support for instruction in agriculture and the mechanic arts.

Southern States

GEORGIA

Columbus.—Motion pictures of the ground-breaking ceremonies for the new Industrial High School were taken by Frank Bradford, principal, to be kept and shown at the next graduation and for a record in future years.

KENTUCKY

Paducah.—Football players at the Tilghman High School will not have to walk a block from the gridiron to the school gymnasium next fall as they have had to do in the past. A \$19,000 brick building to house dressing rooms, showers and lockers is being erected adjacent to the field with PWA funds.

MISSISSIPPI

Greenville.—The \$45,000 school for Negro pupils will be built on the site originally planned by the school board in spite of protests by the Negro population that the site is near the convict cage and that the roads approaching it are bad. The school board announced that it would plant hedges about the grounds high enough to cut off any view of the cage.

SOUTH CAROLINA

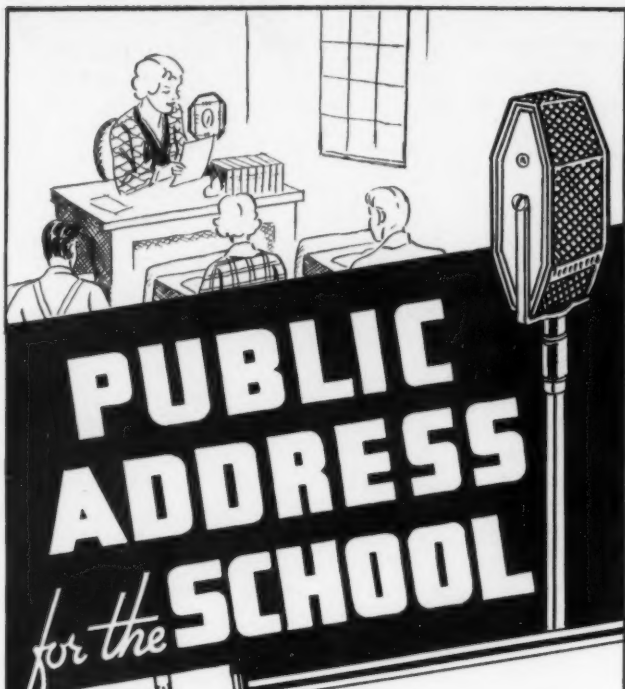
Columbia.—The statewide every pupil testing program, a nonprofit, voluntary educational service to enable junior and senior high schools of the state to increase their knowledge of class and pupil achievement in the principal subjects of the curriculum, is scheduled for May 4 to 8.

VIRGINIA

Newport News.—An indicated deficit of about \$7,500 may make it necessary to close the public schools a few days ahead of schedule, according to Supt. Joseph H. Saunders, as the school board cannot legally incur a deficit. . . . Two additions to the main building of the Virginia School for Colored Deaf and Blind Children are being planned.

WEST VIRGINIA

Wellsburg.—Flood damage estimated at \$20,000 closed the high school here for a period of three weeks. Reports to the effect that the building had been undermined were false, according to Supt. Olen Rutan, who said that the waters washed the earth from under the footing of the manual training department on the south side of the school and that while it may be necessary to build a retaining wall at this portion, the rest of the building is unaffected. Other schools in the district, which were not badly affected by the floods, were closed as schools and used to house the flood victims.



Public Address is playing an increasingly vital part in education today. Its valuable uses—for assemblies, relaying messages, overflow crowds, sporting events, alarms, etc., make it practically a necessity in every modern school. ALL'ED RADIO maintains a large well-trained staff of sound engineers whose wide range of experience qualifies them to cope with any sound problem. We treat each project

as an individual case. We invite you to submit your public address specifications to our Sound Engineering Division for helpful advice and low cost estimates without any obligation on your part. What we did for the Jackson, Ohio, High School (*The Nation's Schools*, March 1936) and for hundreds of others, we can do for you. If you are contemplating a new system or renovating your old, send for the FREE new Spring and Summer ALLIED Catalog. The Public Address section with its budget-minded prices is particularly valuable and illuminating.

RADIO LABORATORY EQUIPMENT

Our past successful experience has taught us exactly what radio items are needed in the well-equipped classroom and laboratory. As Radio Supply Headquarters we feature a complete line of radio text books, oscillographs, test equipment, batteries, radio relays—everything for the modern, up-to-date laboratory at the lowest prices. It will pay you to keep a copy of this catalog on file for instant reference.

RADIO-BUILDING PARTS KITS

We specialize in serving radio classes and clubs with matched kits of parts. We furnish free parts lists for building any radio circuit. We will be glad to send quantities of free parts lists, set-building literature and additional catalogs upon request.

Write for Our Free Catalog

Allied Radio
833 W. JACKSON BLVD.
CHICAGO, ILL. DEPT. SN



Plenty of ROOM and WRITING Surface

A FLOATING-TYPE arm and curved-out support assure ample room and comfort in this *Heywood-Wakefield Movable Chair Desk*. There is a generous sized writing surface, too (14" x 20") which is located directly *in front* of the student so as to guarantee maximum usability. Of course, this is an economical unit because it combines desk and chair . . . permits flexibility of use and arrangement. You'll find rugged construction throughout. Tops are of solid Birch (not veneer) to withstand severe use, careless handling . . . and to eliminate chipping or buckling. Tested Steel frame . . . solid Birch, heavy saddle seat. Available with or without drawer.



New Catalogue of Heywood-Wakefield School Furniture is now ready. Send for your copy!

HEYWOOD-WAKEFIELD

MAKERS OF FINE SCHOOL FURNITURE

174 PORTLAND ST., BOSTON, MASS.

Sales Offices in 28 Principal Cities

NAMES IN THE NEWS . . .

Eastern States

FREDERICK H. BAIR, formerly superintendent of public schools at Shaker Heights, Cleveland, has been appointed superintendent of schools in Bronxville, N. Y. Mr. Bair succeeds WILLARD W. BEATTY, who resigned to become director of Indian Education in Washington.

DR. MERLE MIDDLETOWN ODGERS, dean of the college of liberal arts for women at the University of Pennsylvania, has been made president of Girard College, Philadelphia. Doctor Odgers succeeds CHEESMAN A. HERRICK, who has resigned. Girard College was opened in 1848, established under the will of Stephen Girard, who left a \$6,000,000 estate for that purpose. The school, which is open to fatherless boys from the ages of six to eighteen, is said to be the most highly endowed institution of its kind, for the school's estate is now \$80,000,000.

The REV. WILLIAM R. KELLY has been made superintendent of schools for the Catholic Archdiocese of New York. For the past seven years, he has been executive secretary of the Catholic school board. He succeeds to a post which has been open since the death of MGR. JOSEPH F. SMITH.

ELMER H. WEBBER, superintendent of schools at Mapleton, Me., was reelected on April 1, to serve his nineteenth and twentieth years as head of that school system. This is the thirteenth time he has been reelected by the school board.

MARY A. KENNEDY, principal of P. S. 91, and JACOB THEOBALD, principal of P. S. 165, both in New York City, have been made assistant superintendents. These vacancies were caused by the death of WILLIAM O'FLAHERTY and LIZZIE RECTOR.

RAYMOND H. CURRAN, a member of the faculty of Old Town High School, Old Town, Me., has been announced as principal of the junior high school to succeed ELMER B. WILLIAMS.

HENRY W. FOSTER, for twenty-seven years superintendent of schools of South Orange and Maplewood, N. J., died at his home in Florida at the age of 79. Mr. Foster retired several years ago.

Middle Western States

DR. WILLIAM H. JOHNSON, assistant superintendent of the Chicago public schools, has been named the superintendent to succeed the late WILLIAM J. BCGAN. Doctor Johnson was born in Chicago, was formerly professor at the

Chicago Normal College and for ten years has been a lecturer on education in the graduate school of Loyola University.

DR. CHARLES EDWIN FRILEY, vice president and dean of the division of industrial science, Iowa State College, has been elected president of that institution. He will succeed DR. RAYMOND M. HUGHES, who resigned because of ill health but who will continue as president emeritus, engaging in personnel work.

DR. ARTHUR E. MORGAN, who submitted his resignation as president of Antioch College to the board of trustees three years ago, when he took over the position of chairman of the Tennessee Valley Authority finally had it accepted on March 31. DEAN A. D. HENDERSON is acting president of the college.

HENRY GEERLINGS, school board member at Holland, Mich., was chosen president of the Michigan Association of Superintendents and School Board Members at the annual meeting in Detroit. SUPT. JOHN A. LEMMER, Escanaba, Mich., was named vice president, and H. C. DALEY, assistant superintendent, Highland Park, was reelected secretary-treasurer.

ROBERT JEFFERY, principal of the Foreman Elementary School; ELLEN CONNELL, principal of the Gray Elementary School; HARRY VAILE, principal of the Riis Elementary School; WALTER F. SLOCUM, principal of Schurz High School; WILLIS E. TOWER, principal of Englewood High School, and ALBERT EVANS, principal of Tilden Technical High School, are being retired by the Chicago board of education, having reached the mandatory retirement age of sixty-five.

SUPT. DAVID A. VAN BUSKIRK, Hastings, Mich., was reelected president of the Michigan Education Association at the annual meeting of the representative assembly held recently in Detroit.

Southern States

J. V. ROBERTS, a former superintendent of schools at Sisterville, W. Va., has been employed as the full-time representative of the West Virginia State Education Association. Mr. Roberts will attend meetings of affiliated units, county teachers' associations and regional round tables, carrying to them the program of the association, obtaining their views and enlisting the cooperative efforts of all teachers in the state in determining policies and procedures.

W. W. WALKER, an attorney at Eatonton, Ga., has been elected to serve out the unexpired term of the late WARREN M. MARSHALL as superintendent of education for Putnam County. W. J. BEALL, president of the board of education, has been acting superintendent since Mr. Marshall's death in February. Mr. Walker's term will run until January 1, 1937.

DR. WILLIAM J. HOLLOWAY, one time state supervisor of rural schools of Maryland, and assistant state superintendent of schools from 1922 to 1925 when he became principal of Salisbury State Normal School, died recently at the age of sixty-three.

WILLIAM A. PURKS, for the last twenty-six years superintendent of schools of Greene County, Ga., died at his home in White Plains, at the age of seventy-seven. His daughter, SALLIE PURKS, is a teacher at Greensboro, Ga.

Western States

CLAUDE M. HIRST, assistant chief of the division of schoolhouse planning of the California state department of education, has resigned to become director of education for the natives of Alaska in the office of Indian affairs, U. S. Department of the Interior.

DR. WILLIAM A. FRANKLIN, former professor of education, Panhandle College, has been appointed to assist in the revision of the curriculum and do research work at Ponca City, Okla.

WILLIAM J. PADEN, recently removed as superintendent of schools at Alameda, Calif., was reinstated through the concerted movements of the minority members of the board, the Parent-Teacher Association and the Dad's Club, whose action forced the board to rescind the action that was taken on March 3, which ousted Paden and put EINAR SORENSEN, vice principal of the Lincoln School, in his place. Mr. Sorensen was reassigned to the vice principalship following Superintendent Paden's reinstatement.

CHARLES D. HAYNES, superintendent of schools at Hamilton, Mont., was named president of the Montana Society for the Study of Education.

The VERY REVEREND FRANCIS V. CORCORAN, C.M., S.T.D., former president of De Paul University Academy, Chicago, has been appointed superior of the Los Angeles Junior College in California. Doctor Corcoran takes the place of the REV. THOMAS LEVAN, who died recently.

PAYNE TEMPLETON, principal of the Flathead County High School at Kalispell, Mont., for eleven years, has been chosen superintendent of schools for Helena, Mont., to succeed ROBERT O. EVANS, who resigned after serving seven years in that position.



"NEO-CLASSIC B"



"TAB-L-ARM"

FOLDING CHAIRS WITH STYLE, BEAUTY, STRENGTH, and COMFORT

FOR AUDITORIUM
AND CLASSROOM

**Sturdily Built
Guaranteed**
Many Styles and
Prices to Choose From

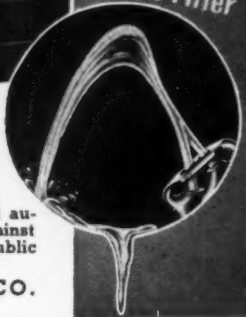
WRITE FOR CATALOG
AND PRICES

"PRESS-TOE LOCK"
LOUIS RASTETTER & SONS CO., Fort Wayne, Ind.

HEALTH-SAFE, Convenient, too



- ★ Two Stream Projector
- ★ Automatic Stream Control
- ★ Non-Squirting
- ★ Glass Filler

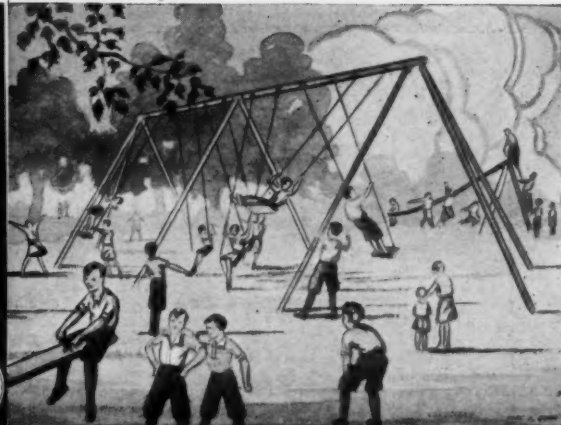


● This is No. 2614, a new Halsey Taylor drinking fountain designed to afford the maximum in CONVENIENCE as well as sanitation! The glass filler gives it a double-purpose; like all Halsey Taylor fountains it has the patented two-stream projector and practical automatic stream control which protects against contamination! Ideal for schools and public installations.

THE HALSEY W. TAYLOR CO.
WARREN, O.

SPECIFY **HALSEY TAYLOR**
DRINKING FOUNTAINS

M
E
D
A
R
T



PLAYGROUND APPARATUS

Write for
Playground
Apparatus
Catalog P-3

When Swings, Slides, Giant Strides, See-Saws and all the other equipment available for modern play-yards, claim your attention—consider MEDART PLAYGROUND APPARATUS—especially if safety, service and durability concern you most . . . Sixty-two years of manufacturing experience is reflected in every piece of MEDART Tested APPARATUS . . . Let us help you plan your Playground.

Consult with 'MEDART' when considering Gymnasium Apparatus, Basketball Backstops, Steel Lockers, Wardrobes, Cabinets or Shelving.

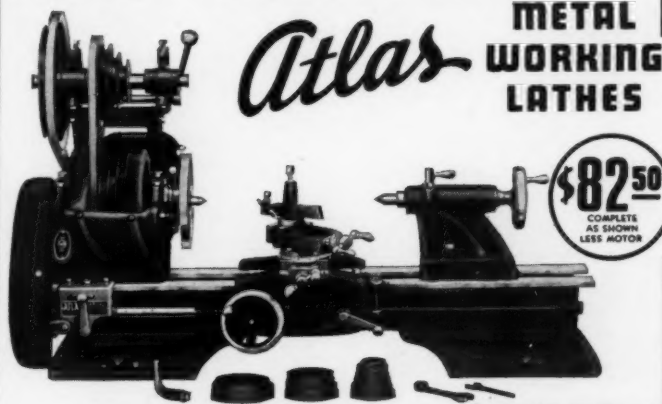
FRED MEDART MANUFACTURING CO.

3532 DEKALB STREET

ST. LOUIS, MISSOURI

Sales Engineers in all Principal Cities—Consult your Telephone Directory

NEW! MODERN!



\$82.50
COMPLETE
AS SHOWN
LESS MOTOR

MODERN DESIGN MODERN CONSTRUCTION

This new Atlas is an ideal metal lathe for the school shop—designed for accuracy and efficiency, and built to stand the wear of expert student use. Bed is 36" long. Has 10 1/4" swing, takes 18" between centers, and may be fitted with attachments for all machine shop operations.

Other new Atlas metal lathes priced from \$35.50 up. "Better to have several low-priced lathes and give more students a chance," say many shop teachers, "than one expensive model and a waiting line." Write today for latest catalog of metal and wood lathes, drill presses, tools and attachments.

ATLAS PRESS COMPANY
572 N. Pitcher St., KALAMAZOO, MICH.
Complete displays at 35 E. Wacker Drive, Chicago,
130 W. 42nd St., New York, 113 N. 3rd St., Philadelphia.

FEATURES

Self-contained counter-shaft and universal motor bracket. Threading range 4 to 96 per inch. 16 speeds from 28 to 2072 R.P.M. Heavy duty enclosed on-off switch. Automatic reversible power feeds. Threading dial. Graduated tailstock ram. Modern V-belt drive. New heavy cast iron gear guard. New threading chart. New design carriage. Laminated shims throughout. Heavy, new design compound rest. Well and pin for center lubricant. Scientific weight distribution.

ATLAS PRESS CO. 572 N. Pitcher St., Kalamazoo, Mich.
Kindly send your latest catalog.
Name.....
Address.....
City and State.....

NOTES FOR BUYERS . . .

Debate

"RESOLVED, that the school is more responsible than the home for injuries to the eyes of the young."

The class picked the judges—the principal, the superintendent of schools and the president of the board of education. Teams were chosen. Blinker Jones was affirmative captain; Squint Harper, negative.

Blinker sits six rows from the windows. He proved by a new G. E. light meter that he received only 10 per cent as much light as the geranium on the window sill. He exhibited a pair of eyes about as red as the geranium.

Squint Harper brandished his horn-rimmed glasses dramatically as he reported on the shocking home lighting conditions under which pupils in the class did their home work.

Soberly the judges listened. Afterward, they went to the principal's office and sent a letter to the General Electric Institute, Nela Park, Cleveland. "Please send us information about your 'better sight' demonstration classrooms," they wrote. They had had their eyes opened about eye conditions in their own schools and homes.

Geographic

A school child travels seven seas, inside his own geographies, with supplements of maps and globes, to take him into far abodes. The teacher summons various aids, to give her eager youths and maids, a new conception of how man, adjusts himself as best he can, to natural environment. She, will find this little book to be, a very distinct aid to her; below's its name and publisher.*

All Alone

Alone with her books, the little teacher prepares for another day. That is, once she did. Now she is alone with her lantern slides, post cards, white rats, radio programs, correlating manuals, bricks and boards, sprouting seeds, photoplay guides and newly hatched chicks.

A big help to the little teacher alone among her assorted pupils and paraphernalia are the delineascopes and projectors of the Spencer Lens Company, Buffalo, N. Y. A table delineascope takes either glass slides or transparent biological specimens. Slides are placed on the

*Aids for the Geography Teacher, Fourth Edition. Chicago Heights, Ill.: Weber Costello Company.

slide track right side to, making it possible for the teacher sitting at her desk to indicate on the slide with a pencil the subject under discussion. The pencil appears as a pointer on the screen above the teacher's head.

Likewise Spencer projectors can be fed post cards, drawings, compositions, photographs, pages in books, coins, minerals and even small water animals in petri dishes. A new catalogue describes these as well as the new Spencer microscopes.

Top of the Morning

Tops, tops—our head fairly spins. We had just heard the cook in a school cafeteria declare that the Vulcan gas range was the absolute tops in her estimation. Now Vulcan comes along with a new top that tops the old top.

The latest top, said to save up to 20 per cent in gas consumption and at the same time to cook faster, has a series of radial fins which are cast as a part of the under side of the top extending down to the fire brick inside the burner box. These fins increase the absorption surface. They also distribute the flue gases to all sections of the top, resulting in higher temperatures at the sides while maintaining the high temperature in the center ring.

Top this off with a letter to Standard Gas Equipment Corporation, 18 E. 41st Street, New York City, if you want a really topnotch description of their new tops.

Sorcery

"The Sorcerer's Apprentice"—weren't you just that when a high school pupil in the science laboratory? Was there not a mounting excitement in certain experiments that bore you on toward desperation if the instructor was not close at hand? But, as with the apprentice's broom in Goethe's poem and Dukas' music, at the sorcerer's command order quickly reigned and calamity no longer threatened.

These modern sorcerers in chemistry and physics, in biology and agriculture, require for their apprentices laboratories that are safe, convenient and up-to-the-minute in equipment. Tables with soapstone sinks, lead lined troughs and reagent racks; attached stools or chairs; aquariums; plant boxes; germinating beds; lantern stands; fume hoods; notebook cases—all the varied bits of appa-

ratus that the proper teaching of science requires the good school must provide.

Hamilton-Invincible, Inc., Two Rivers and Manitowoc, Wis., makes all of these and more. One glance at its new catalogue will set a science teacher to wishing he were the kind of sorcerer who could summon at will all the teaching tools he covets for his young apprentices.

Shop and Nursery

Nature is what our Scotch friend calls "slow on the uptake." Consider the design of a human infant. We attended a recent exhibit of 1936 models in a hospital nursery, and for all we could detect they were cast in the same old mold. No sign of streamlining!

Industry moves at a swifter pace, so we were not surprised to find modern contours in the new metal lathes being made by the Atlas Press Company, Kalamazoo, Mich. There's business acumen for you. But, honestly, while expecting streamlining, we were not prepared for the extreme accuracy with which this piece of school shop equipment operates.

Besides being considerably more accurate, the new lathes are handier to work with and are still within the Atlas low price range. Weight is scientifically distributed, and the new models are in every way a credit to industrial designers.

Easter Holidays

T. J. SMITH, PRINCIPAL
LINDBERGH HIGH SCHOOL
NEW YORK CITY

BERMUDA PROBABLY AS BEAUTIFUL AS ADVERTISED BUT TROUBLED THOUGHTS PREVENT COMPLETE ENJOYMENT STOP ARE YOU KEEPING IN MIND AND IN BUDGET DISHWASHER (MECHANICAL) FOR MY DEPARTMENT STOP ALMOST RODE BICYCLE OFF CLIFF YESTERDAY AT THOUGHT YOU MIGHT NOT DEFEND ITEM WITH FITTING ELOQUENCE TO SUPERINTENDENT AND BUDGET COMMITTEE STOP OUR CAFETERIA TOO BIG FOR MANUAL METHODS STOP REMEMBER MY CHOICE IS HOBART STOP SANITATION LESS BREAKAGE ECONOMY MODERN TIMES STOP REMEMBER ALL THE WORDS STOP BACK MONDAY WEEK STOP MOST IMPORTANT ITEM IN WHOLE SCHOOL BUDGET STOP KNOW YOU ALWAYS FIGHT FOR WHAT YOU BELIEVE IS RIGHT STOP HEALTH OF CHILDREN MUST COME FIRST STOP HOLD OUT FOR A HOBART.

JANE GOODFOOD

Why Buy a Mower That Does But HALF The Job?

The Power Driven Sickle Mower (illustrated) will cut everything . . . the rough places . . . spots where you've had to use hand scythes . . . even sprouts . . . and a great big swath every time. The rugged motor has ample power to propel both the tractor and run attachments at the same time.



Ask for a Demonstration

The GRAVELY

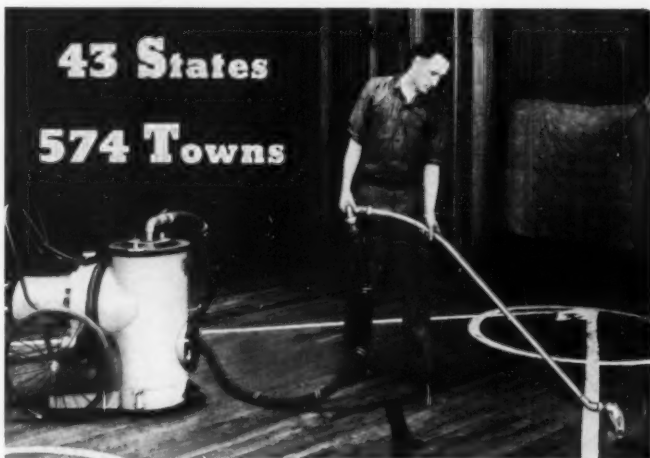
Works Under Every Condition!

To this same tractor you attach a practical, sturdy 30-inch Rotary Type Mower—two mowers for the price of one. In winter, you can convert it into a Snow Plow. Or use it as a cultivator any time with special tools to fit. Drop a postcard for complete details.



GRAVELLY MOTOR PLOW AND CULTIVATOR CO.

Box 781
DUNBAR,
W. VA.



Architects and Educators do not have to guess whether the Spencer Method of Cleaning is thoroughly practical and reliable. Someone in their vicinity can quickly assure them on this point.

In many cities where Spencer Central Vacuum Cleaning Systems have been specified for all new schools for many years, they are now installing Spencer Portable Cleaners in the older and smaller schools.

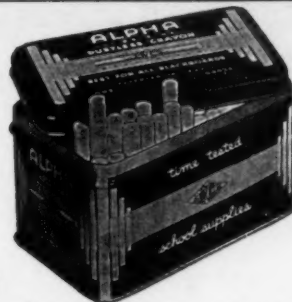
The advantages of Spencer Cleaning are primarily ease and speed of operation, long life, quiet operation, freedom from repairs, and a degree of cleanliness than can only result from a correct vacuum, a sufficient volume of air and the most modern development in vacuum cleaning tools.

Write for the Spencer Booklet on school cleaning and a list of Spencer users in your vicinity.

SPENCER CENTRAL AND PORTABLE
HARTFORD VACUUM CLEANING SYSTEMS

S-58

THE SPENCER TURBINE CO., HARTFORD, CONN.



NEED ERASERS OR CRAYON?

ALPHA DUSTLESS BLACKBOARD CRAYON—Does everything a good crayon should do, BETTER. It is DUSTLESS . . . makes a solid, easily read, quickly erased mark . . . and measured by any standard, IS A GOOD BUY.

NO. 5 COSTELLO DOUBLE SEWED BLACKBOARD ERASER—The nationally preferred school blackboard eraser. High grade wool felts are doubly sewed to a rigid back, reinforced to prevent curling. It erases clean, LASTS A LONG TIME, AND KEEPS WITHIN BUDGET LIMITATIONS.

Free samples sent upon request. Address Dept. EC521.

WEBER COSTELLO CO.

Manufacturers

Chicago Heights, Ill.



VICTOR Faces the field

-with exclusive Projector and Sound Features



ANIMATOPHONE
Model 25
\$360

16 mm ANIMATOPHONE embodies exclusive refinements that cannot be ignored . . . advantages that have made it the World's most widely used, most moderately priced sound picture reproducer. Only in ANIMATOPHONE, for instance, will you find POSITIVE Protection against Film Damage . . . PERFECT Simplification insuring trouble-free operation and maintenance . . . with decidedly superior sound and picture reproduction! Model 24 (A.C.) for classroom and LARGE Auditorium. Model 25 (A.C.-D.C.) . . . World's lightest and most compact . . . for classroom and small auditorium. Write for literature . . . Ask for Demonstration

VICTOR ANIMATOGRAPH CORPORATION
DAVENPORT, IOWA :: New York City
Chicago — Los Angeles

Conveniently housed in two compact cases.

LEADS THE FIELD IN
PERFORMANCE
AND REFINEMENTS
AT LESS MONEY

VICTOR
16 mm

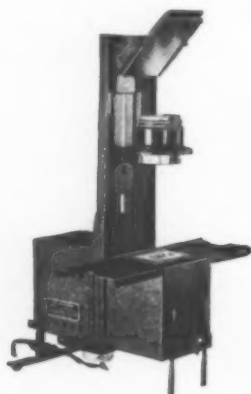




Here's a Projector YOU CAN USE AT YOUR OWN DESK!

The Spencer Model "B" Delineascope permits you to lecture to your class, illustrate specific points with glass slides—and still remain seated at your own desk in the front of the room. No need to stand up to operate the projector yourself at the back of the room; no need to have it operated by an inexperienced student. You sit facing your class, all your lecture notes and facts at your finger tips, the projector on your desk ready for instant use. It is the ideal way to use visual education in teaching.


In operating the projector, you place the glass slide right side up on the slide track. The image on the screen is shown to your class exactly as the slide appears to you. Using a pencil you can point out, on the slide, the specific object under discussion—and the image of the pencil appears as a pointer on the screen.



MODEL "B" Delineascope

Projects glass slides and transparent biological specimens. 500-watt Mazda bulb and superior optics assure brilliant, clear images on the screen. Produces approximately 3-foot pictures when used on lecture table only 5½ feet from the wall. For complete information and prices write for Folder K-78.

Please address Dept. P-5.

Spencer Lens Company
Buffalo  New York

THE BOOKSHELF • • •

THE EFFECTIVE AND THE INEFFECTIVE COLLEGE TEACHER. A STUDY MADE FOR THE NATIONAL PERSONNEL SERVICE, INC. By Anna Y. Reed and Others. New York: American Book Company, 1935. Pp. xiv+344. \$3.50.

Results of a questionnaire study of an attempt to determine the effective and ineffective college teacher.

THE GREAT POWERS IN WORLD POLITICS. INTERNATIONAL RELATIONS AND ECONOMIC NATIONALISM. By Frank H. Simonds and Brooks Emeny. New York: American Book Company, 1935. Pp. xii+644. \$3.75.

Collaboration between a political scientist and eminent journalist to produce a significant contribution in analysis of current politics. The Simonds view of Fascism and National Socialism as popular revolts is intriguing. Recommended as collateral reading in the upper secondary school.

A SEQUENCE OF EDUCATIONAL INFLUENCES. By Robert Ulich. *Harvard Documents in the History of Education, III.* Cambridge: Harvard University Press, 1935. Pp. x+91. \$2.

Unpublished writing of Pestalozzi, Froebel, Diesterweg, Horace Mann and Henry Barnard are presented with the author's contribution in tracing a sequence of educational influences.

PROBLEMS IN EDUCATIONAL SOCIOLOGY. By Charles L. Ansbach and Wray H. Congdon. New York: American Book Company, 1935. Pp. xviii+314. \$2.

Problem book in educational sociology. Pointed chiefly for teachers' college courses.

PHYSICAL EDUCATION TEACHING MANUAL. By Mabel E. Rugen and Jeannette B. Saurborn. Ann Arbor, Mich.: Edwards Brothers, Inc., 1936. Lithographed. Pp. vi+140. \$1.50.

Manual for physical education teachers concerned with special teaching techniques for mobile groups. It attempts to do for physical education what a number of other publications cover in other subject matter areas. Having been used experimentally since 1931, it is now presented as a first publication, in flexible form, for prospective teachers. Also highly valuable for teachers in service. Practical, well organized and extremely usable.

EVERYDAY PHILOSOPHY OF EDUCATION. LETTERS OF A SUPERINTENDENT. By W. C. McGinnis. Rutland, Vt.: The Tuttle Publishing Co., Inc., 1935. Pp. 132. \$2.

Practical everyday working philosophy of a superintendent of schools as expressed through a series of letters to teachers and principals in several school systems. Worth reading.

WIDTH-WEIGHT TABLES. By Helen B. Pryor. Stanford, Calif.: Stanford University Press, 1936. Manual (15 pages) and Cardboard Tables. \$0.60.

All interested in the measurement of the physiologic development of young people between the ages of one and twenty-four years will rejoice in the progress in diagnosis which the Pryor height-weight-width tables make possible. Conventional height-weight tables make no allowance for build; yet all know that individuals differ in build. The new tables show the width appropriate for an individual in terms of his sex, age, height and build. Every school will find these tables much more helpful than the old.

PSYCHOLOGY OF ADOLESCENCE. By Luella Cole. New York: Farrar & Rinehart, Inc., 1936. Pp. xvi+503. \$3.

Adolescent psychology made practical for the teacher and administrator by (1) including only facts objectively proved; (2) a winnowing of the literature for a complete picture, and (3) the inclusion of many practical problems.

THREE NEW GREGG BOOKS

OUR BUSINESS LIFE, by Lloyd L. Jones. Training for handling personal business transactions and a general understanding of how business functions. Replete with social values. Contains a full activity program. Profusely illustrated in color. Use of work book optional.

..... Text, \$1.50; Work Book, \$0.80

SALESMANSHIP FOR EVERYBODY, by John T. A. Ely and Dr. Daniel Starch. Principles and fundamentals that apply to the individual in every walk of life. Emphasizes social or personal salesmanship, salesmanship training for office workers, and salesmanship applied to obtaining employment. Literally, salesmanship for everybody \$1.40

BOOKKEEPING AND ACCOUNTING PRACTICE, PART I—BOOKKEEPING, by Nathan H. Lenert and Dr. Edward J. McNamara. The business office method of learning bookkeeping. Student learns by observation and doing. Largely self-teaching. Contains practice sets worked out for four different types of business. One-year course \$1.50

Teachers are invited to send to our nearest office for sample copies.

THE GREGG PUBLISHING CO.

New York Toronto Chicago London San Francisco Sydney Boston

*Play Safe
with Safety*

EverWear PLAYGROUND APPARATUS

Minimize accidents in your school playground. Give children the protection *Safety* EVERWEAR EQUIPMENT assures.

Write for Catalog 28

*For Beach and Swimming Pool Equipment,
write for catalog 28W*

**THE EVERWEAR
MANUFACTURING CO.**
SPRINGFIELD, OHIO

EVERYDAY ECONOMICS 1936 EDITION

By Janzen and Stephenson

In this new edition *EVERYDAY ECONOMICS*, a text which is already an established success in more than 450 school systems throughout the United States and in Hawaii, is brought completely up to date. All statistics are the most recent which it is possible to obtain.

In addition the authors have taken into account such changes as those made in 1935 in the Federal Reserve System. They have enlarged the discussion of the Tennessee Valley Authority and have included sections on the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, and social security laws. They have also included detailed accounts of such timely topics as legislation affecting agriculture and the railroads, national housing, new money and banking laws, and many others.

Silver Burdett Company

New York Newark Boston Chicago San Francisco



New!

FROM
MORNING TILL NIGHT
For Grade 1

HAPPY DAYS
For Grade 2

in the
famous CHARTERS-SMILEY-STRANG

HEALTH AND GROWTH SERIES

completing the "health-habit" course for the entire elementary system, grades 1 through 8.

The new books have all the qualities of fine supplementary readers for these grades. Carefully graded as to content and vocabulary; delightfully illustrated in color.

The Series:

FROM MORNING TILL NIGHT—	Grade 1	HEALTH PROBLEMS—	Grade 6
HAPPY DAYS—	Grade 2	ADVENTURES IN HEALTH—	Grade 7
GOOD HABITS—	Grade 3	HEALTH KNOWLEDGE—	Grade 8
LIVING HEALTHFULLY—	Grade 4		
WISE HEALTH CHOICES—	Grade 5	Teachers' Manuals available	

Send for further information

THE MACMILLAN COMPANY
NEW YORK BOSTON CHICAGO DALLAS
ATLANTA SAN FRANCISCO



How your school can Enrich its Curricula

YOUR school can now enrich its curricula, and offer its students a broader cultural and scholastic background than has ever before been possible—by supplementing regular courses with modern radio education.

The RCA Victor School Radio System provides a loudspeaker in every classroom, and greatly aids teachers with supplementary instruction. Pupils profit not only by important educational broadcasts from our leading stations, but also by organized programs produced by your own school. For it is now possible to transmit your own lectures, talks and record programs over the same wiring system as is used for the regular broadcasts.

This entire system is designed and manufactured by RCA—the greatest name in radio and sound reproduction. Each installation is tailored to fill the needs of the particular school. Clip the coupon for details.



RCA Victor Control Cabinet, center of the RCA Victor School System.



RCA Victor

SCHOOL SOUND SYSTEMS

RCA MANUFACTURING CO., INC.

Camden, N. J. A Service of the Radio Corporation of America

Commercial Sound Section, Dept. NS.,
RCA Manufacturing Co., Inc., Camden, N. J.
Gentlemen: Please send me complete information about the

following RCA Victor equipment: _____
NAME _____ STREET _____
CITY _____ STATE _____

SOURCE BOOK FOR SOCIOLOGY. By Kimball Young, *American Sociology Series*. New York: American Book Company, 1935. Pp. xvi+639. \$3.50.

Valuable and comprehensive is this source book in sociology. Pointed primarily for extended reading in college and university courses, it may also be recommended for upper secondary school libraries.

THE YEARBOOK OF EDUCATION, 1936. Edited by Harley V. Usill and Others. London: Evans Brothers Limited. Pp. 1,024. 35 shillings net.

United States' professional libraries should make greater use of this unusual British publication. The 1936 edition is devoted to a review of postwar education. It is scholarly and also enlightening, a not too frequent combination.

NO FRIENDLY VOICE. By Robert Maynard Hutchins. Chicago: The University of Chicago Press, 1936. Pp. viii+197. \$2. Stimulating collection of selected papers by an outstanding university president. Contains his unusual speech to the graduating class of 1935.

DISEASE AND DESTINY. By Ralph H. Major, M.D. New York: D. Appleton-Century Co., 1936. Pp. xiv+338. \$3.50.

Interesting speculations of the effect of certain diseases upon the destiny of nations. Ten significant diseases that played a large part in history are presented in these high spots, starting with Greece in 430 B.C. and ending with Lenin.

FASCISM AND NATIONAL SOCIALISM. A Study of the Economic and Social Policies of the Totalitarian State. By Michael T. Florinsky. New York: The Macmillan Company, 1936. Pp. x+292. \$2.50.

Thoroughly fair and even sympathetic comparative study of fascism and national socialism by an author who previously has made a similar study of Russia. He traces the growth of both of these programs to the disappointment and misery that grew out of the World War. Ideologic assumptions are presented and compared, when possible, with practice. After the story has been told one is conscious of the failings and weaknesses of dictatorship despite the emotional appeals that seem to divert and to satisfy the people. Decidedly worth reading.

A GUIDE TO MEASUREMENT IN SECONDARY SCHOOLS. By J. Murray Lee. *Appleton-Century Series in Administration*. New York: D. Appleton-Century Co., Inc., 1936. Pp. xv+514. \$2.75.

Written specifically for secondary school principals and teachers, this book attempts to develop rational uses of standardized tests as a means of growth and improvement. Worthy of a place in the professional library.

Just Off the Press

OUR AMERICAN HERITAGE. By Lillian S. Coyle and Walter P. Evans. *McGraw-Hill Series in Social and Commercial Studies*. New York: McGraw-Hill Book Co., Inc., 1936. Pp. xviii+717. \$1.80.

ASSEMBLY ROOM PLAYS. Selected by A. P. Sanford. New York: Dodd, Mead & Company, Inc., 1936. Pp. v+272. \$2.

A SURVEY OF THE MOVEMENTS CULMINATING IN INDUSTRIAL ARTS EDUCATION IN SECONDARY SCHOOLS. By Ray Stombaugh. *Teachers College, Columbia University, Contributions to Education*, No. 670. New York: Bureau of Publications, Teachers College, Columbia University, 1936. Pp. vi+192. \$2.10.

OUR AMERICA. By Adolph Gillis and Roland Ketchum. Boston: Little, Brown and Company, 1936. Pp. xxviii+428. \$1.28.

FROM THEN UNTIL NOW. By John T. Greenan and H. Louise Cottrell. New York: McGraw-Hill Book Company, Inc., 1936. Pp. xix+421. \$1.36.

CONTENTS

For June, 1936

Side Glances—

SECTION I—EDUCATIONAL ADMINISTRATION

Looking Forward	13
THE EDITOR considers the growing menace of localism with respect both to persons and ideas; the housing question in relation to the junior college; Chicago's school system honeycombed from top to bottom with politics, and representation on the various state planning commissions.	
The Community Takes the Good of This School.....	16
WILLIAM L. MOORE, the principal, tells how through varied services the John Hay High School, Cleveland, has fully justified to the townspeople an expensive building expensively equipped.	
Can Any English Instructor Teach High School Journalism?.....	19
Asked GLENN HOLDER of ninety journalism teachers representing high schools in cities of 10,000 and over in all parts of the United States. Holder himself teaches journalism in the Morton Senior High School, Richmond, Ind.	
Now a High School Course in World Relations.....	20
VICTOR E. PITKIN, a teacher in Reading, Mass., advocates this method of bringing about an informed electorate.	
Unfortunately, I Like Teaching.....	21
The lament of a California school teacher, who must remain anonymous in order to remain employed.	
Opposed to a Teacher-Tenure Law.....	22
Small town superintendents in Indiana did not care for the taste they had of a teacher-tenure system, reports DONALD L. SIMON, superintendent of schools, Griffith, Ind.	
Reporting Pupil Progress	23
Some devices that are satisfactorily replacing the old-time report card are outlined by WILLIAM H. BRISTOW, director of the curriculum bureau, Pennsylvania department of public instruction.	
Student Rule in a Junior High School.....	26
And how it grew. T. R. EHRHORN, principal of the junior high at Marshalltown, Iowa; is enthusiastic about the plan as citizenship training.	
Geared to the Intelligent Lay Mind.....	27
Is the published budget of the board of education, Rochester, N. Y. JAMES M. SPINNING, the superintendent, and HAROLD E. AKERLY, assistant superintendent, describe the practice of printing and distributing the budget in advance of the public hearing.	
Where Fifth Graders Play Contract.....	29
Veterans of future bridge tournaments at the University Elementary School, Columbia, Mo., are introduced by RALPH B. ANDERSON.	
A People's Future in a Child's Garden.....	30
The vegetable and flower garden contest in which some 18,000 children in the Territory of Hawaii compete each year is enthusiastically described by CLIFFORD CRESSLER.	
The Teacher of Social Science and Virginia's New Curriculum.....	33
Principal G. B. WYNNE of the Exmore-Willis Wharf High School, Exmore, Va., outlines a study unit on world peace.	

EACH new volume brings changes large or small in your favorite magazine of school administration. In January, The NATION'S SCHOOLS adopted a complete new dress. No subscriber has written except to praise the new format; in fact, we were showered with sweet-scented bouquets. Our readers definitely prefer modern editorial contents in a modern package. The next issue starts another volume—Vol. 18, No. 1. Our midyear modernization program will center largely around our news section. We are to break down certain artificial barriers in news treatment and make the whole of it a running digest of the month's events. There will no longer be a set page devoted to visual education, radio, private schools, personals and the like. No special interest will be slighted, but each item will stand on its own merit in relation to all the news. This saner consideration of news values we believe our readers will appreciate.

THE Jacksonville plan of cooperative vocational education ensures the graduate of training in a specific occupation and a high school diploma without closing his educational program in the event he finds he can go to college.

R. C. Marshall, superintendent of public instruction in Duval County, Florida, will describe in the July issue the way the plan works. For two years the pupil spends four hours a day five days a week in the occupation of his choice. He spends two or three hours a day in a senior high school receiving regular academic training. He has one or two hours a day in the vocational school studying the technical subjects directly related to the job. The townspeople think the system good.

Published monthly by The NATION'S SCHOOLS PUBLISHING Co., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1936, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Printed in U. S. A.

CONTENTS

"HIGH SCHOOL
Built on "Five-Year Plan"—that's the new John Marshall High School, Rochester, N. Y. Francis R. Scherer, the architect, will describe it in the July number. Some twelve novel items of planning and equipment are listed. Almost all equipment was especially designed and custom built for durability. The building was dedicated April 26. The final section, the natatorium, will be completed about the time you are reading about the whole project in *The NATION'S SCHOOLS*. Floor plans and many photos will accompany the article.

THE set-up of a home-making department in a town of 4,500 is scheduled for summer publication. Hazel Hatcher, instructor in vocational home economics in the high school at Crystal City, Mo., tells of the five-room cottage, originally a "company house" in this industrial town, where vocational training is given. The home management courses taught in this school cottage are so popular that there is a waiting list for a full year in advance.

AN EXPERIMENT in character training in the schools of Jamestown, N. Y., will be outlined in the next issue by George A. Persell, superintendent of schools. A syllabus on character education was prepared in Jamestown, but many teachers made no use of it. The superintendent then appointed a teachers' committee of seven to go over the syllabus and codify it. Ten traits of character were selected for special emphasis.

IN THE progressive high school of today no classroom teacher has greater opportunity for satisfactorily influencing the homes of the community than has the English teacher. Some classroom opportunities for social interpretation will be enumerated in the July number by Leland B. Jacobs, supervisor of English, Lincoln Consolidated Training School, Michigan State Normal College.

Safety Education in Rural Schools..... 34
Delaware farm children learn safe practices under the direction of ALBERT EARLEY, rural supervisor of the state department and director of the state safety council.

When the Flesh Is Weak..... 35
Occasional cases of downright venality occur among school board members. Some are brought to light in this review of court decisions on breaches of integrity in office by M. M. CHAMBERS, specialist in school law.

Today's Junior High..... 37
Verbatim statements concerning curricular trends in twenty-five schools in the North Central area have been assembled by CALVIN O. DAVIS, professor of secondary education, University of Michigan, who makes certain summarizations.

Why Not Ask Them?..... 39
A Kansas superintendent took WILLIAM McANDREW's advice. He found out.

A School Surveys Its Own Guidance System..... 40
This self-survey had good results, according to SUPT. WILLIAM G. BATE of Richmond, Ind.

Happy to Say..... 41
The salute of the month by WILLIAM McANDREW.

SECTION II—THE SCHOOL PLANT

Asbury Park Elementary School, Denver..... 43
T. H. BUELL & Co., Denver architects, drew the plans for this school, of which a side entrance is shown in the full-page illustration.

Accent on Flexibility..... 44
SUPT. ROBERT J. FULLER of Hanover, N. H., describes the new Hanover High School which can be enlarged almost indefinitely without excessive cost and without interference with any part of the present structure or its orientation.

Selecting the School Custodian..... 49
The qualifications demanded of custodial workers in the schools of Muskegon, Mich., are enumerated by H. H. LINN, assistant superintendent in charge of business.

Built in Terms of Sport..... 51
Kent School, Kent, Conn., required a sports building that would meet certain requirements, fall within a limited budget and be maintained economically. WILLIS N. MILLS, architect of New York City, explains how the problem was solved.

A Field for Sport..... 54
A description by W. J. JUDD of the new athletic field built at Darlington, a private school near Rome, Ga.

Lunch in a Country School..... 55
Menus and recipes add to the helpfulness of this contribution to rural school feeding by MARY SPALDING, consultant in nutrition, Massachusetts department of public health.

Food Fit for a Camper..... 60
BESS OLIVER HUDGINGS, Shreveport, La., spends her summers at camp, as do many other school dietitians. She gives practical advice on camp feeding.

Better Plant Practices.....	64	Regional News.....	74
News in Review.....	66	Names in the News.....	78
Private Schools.....	68	Notes for Buyers.....	82
Coming Meetings.....	68	The Bookshelf.....	84
Visual Education.....	70	Index of Advertisers.....	9
Radio News and Programs...	72	Placement Service.....	88

LOOKING FORWARD

The Menace of Localism

PUBLIC education in the United States is decentralized with respect to organization and control. In forty-eight state systems, general educational policy is promulgated by mandatory or permissive statute with the actual administrative responsibility resting with local districts. In many respects this plan is well adapted to the needs of democratic life. Control by any individual or single group is difficult if not impossible. In this decentralized organization there is safety from the bureaucratic use of schools by the central government for specific propagandizing purposes. Differences are possible in accord with local and regional needs.

One of the absolute essentials for the existence and development of this type of educational program and organization is the free and unrestricted flow of persons and ideas. The exchange of sectional viewpoints; variety in types of background, training and outlook; the transmission of new ideas through sectional, state and regional conferences, and freedom from domination by institutions of higher learning are all vital to the existence of the United States plan of education.

With this fundamental need as a standard of appraisal it is impossible not to view with great concern recent and continually increasing tendencies toward localism with respect both to persons and ideas. The tendency to employ only born or naturalized residents of the community, and state-trained personnel, started before the war and reached its high point during the depression. The situation is such today that it is extremely difficult for a resident of one state to secure easily a teaching position in another state. Even when secured, promotion for the outstater becomes much more difficult than for the native son or daughter. When executives are brought from outstate as principals, supervisors and superintendents, there is a definite local reaction. There is created immediately an attitude that preference should have been given the home product and that all promotion must be from within a given system. The newcomer, unless he is socially smart, will find these hostile attitudes a definite handicap in his orientation to the community.

The tendency has gone so far in many instances, especially in large cities, that it is quite impossible to bring either principal or superintendent from other sections. Our large cities are today considered closed shops open only to local talent. State certification authorities have definitely adopted restrictive policies that have resulted in some instances in the practical abolition of certificating reciprocity between states. In addition, it is becoming more and more difficult to place individuals of different race and creed, even though they are native sons and daughters, within areas in which their beliefs are not dominant.

Sometimes the menace of localism takes the form of actual pressures and protests by segments of the teaching profession, followed by political action, as was recently the case in Massachusetts. In this state for many years Commissioner Payson Smith attempted to protect the schools from the menace of localism. Massachusetts brought many teachers and administrators from other states. However, other states did not display a similar enthusiasm for Massachusetts products. The result was a growing dissatisfaction among certain organization leaders in education that found open political expression and also coincided with the governor's general program of localism. With the dropping of Payson Smith localism became a distinct menace to education in Massachusetts. There are similar examples in type, if not degree, in other states and other sections.

The reasons for the growth of localism in education are not difficult to determine. For many years there has been growing within the profession a definite job-concept set toward public school positions. Parents have been taught to think, although probably without direct intention, of public education as offering specific job values to their offspring who select teaching for a livelihood. Expanding training centers, seeking to improve their position through size and influence, soon realized that size could not be maintained without aggressive placement. The certainty of jobs upon termination of work became more attractive in many instances than the institutional educational opportunity. Placement specialists felt that it was easy to control their immediate institutional drawing area by use of various

methods and soon began to consider this region their own preserve.

The production of teaching personnel since 1928, out of all proportion to demand, naturally led the state certifying agencies to protect their own territory from "foreign invasion." State teacher association and professional leaders demanded such protection. Within the teacher organizations themselves there has been growing rapidly the idea of jobs for local boys and girls. All of these reasons have combined to produce restrictions on the freedom of movement of teachers between states and regions to the extent that localism is becoming an educational menace.

Are there available remedies for this condition? What improvements may be considered and made? There are several points of view. One group realistically accepts the vested right job-concept of the local teacher and suggests that freedom be confined to the faculties of institutions of higher learning. Bringing in leaders will tend to stimulate thought to such an extent that the free flow of ideas will not stop if the free flow of persons does. It is dubious whether this plan will work. Other groups believe that ideas can continue to be disseminated and local efforts stimulated through the increasing influence of the regional accrediting associations. The difficulty with this solution is that the accrediting groups did their best work some time ago and their present tendencies are largely toward further standardization and mechanization of existing organization.

It is extremely questionable whether these two plans will promote again the free movement of persons and ideas. Some other means must be found to meet this growing menace. Since there is happily no mandatory legal means of enforcing freedom, it is essential that it arise out of a definite concept of freedom in person and ideas as related to the processes of democratic education. If our training institutions preached this doctrine and our educational leaders attempted to secure acceptance of this thesis within the professional groups, it might be possible to develop gradually a renewed acceptance of an old belief. If our state departments of education would emphasize the place of freedom of persons and ideas in our field practice, the essential viewpoints could be readily created. Shift has not yet become impossible. However, a policy of drift for another decade will make return impossible.

Two other factors appear to be absolutely essential to building up this public opinion. There must be progressively developed a program of production of teachers carefully geared to the actual need. Training institutions observing need, rather than institutional ambition as the criterion for the training of teachers, could stimulate reciprocity by easy certificate exchange without having oversupply in one state a menace to existing jobs in another. Within an area it is going to be exceedingly difficult to overcome localism unless there is large reorganization of local administrative areas

sufficiently large to furnish elbowroom for teachers and people. Unless we are willing to face the need for the free flow of persons and ideas and relieve our schools from the menace of localism, it is questionable how long it will be possible to maintain our decentralized plan of education.

Junior College Buildings

LOCAL social need for the extension of complete secondary school facilities to a greater number of children has slowly crept into local organizations through the organization of the two-year junior college. Institutions of higher learning and accrediting associations immediately attempted to dominate and direct this extension just as their prior efforts have been focussed upon the secondary school. The junior college in imitation of the university, rather than seeking its own particular function, seemed perfectly satisfied to be made academically acceptable and respectable by being taken under the protecting wing of higher education. It gave stability and tone to something new—something upon which the traditionalist looked askance. Possibly this earlier tendency was necessary because established secondary organization also looked upon the new junior college as something to be viewed with suspicion if not active concern.

The early junior colleges were housed in whatever building space remained after other needs were cared for. It might be an old house, a discarded high school or a renovated elementary building. There are today only a few buildings established specifically for junior college needs. School districts properly decided that specific building should be deferred until the place of the new unit had been definitely established in the administrative plan.

Within the past few years the junior college has become self-conscious. In many states the organization of junior college deans has resulted in definite propaganda plans for direct state support and for new and separate buildings to house current programs. In many instances these demands have been particularly insistent and with the present lack of state oversight and control respecting PWA projects, it is entirely possible that a large number may be built within the next few years. Can this measure today be considered as worthy of stimulation or should caution be urged in the development of junior college buildings?

As a separate entity the junior college is just a temporary stop-gap. The junior college is distinctly secondary education whether integrated in a traditional university program or standing by itself locally. In the ultimate development of public education in the United States, it has no place as a separate entity. It must already be apparent to the student of public administration that the many experimental tendencies in organization of the past quarter century are rapidly

crystallizing into what seems logically to be the ultimate plan of the future—the six-four-four. In practice there will probably be two types of independent local administrative units—the six-four and the six-four-four.

In general the four-year unit is much more satisfactory from the administrative and social aspects and probably has a better possibility of survival in light of our educational history.

If these assumptions are true it indicates that the present two-year junior college will be integrated with the eleventh and twelfth years to form the community college. The basic purpose of this organization will be social and not college preparatory. Terminal curriculums of types just beginning to appear in certain of our more progressive junior colleges will form a large part of the program. Preparation for the university will be a minor curriculum with respect to numbers but not in quality.

In light of these tendencies it seems a little premature to build up propaganda for specialized buildings to house a temporary unit. Better planning indicates the need for study and research into the field of more permanent tendencies and the progressive development of a physical plant to house the natural four-year unit that is developing. It is at present difficult to justify expenditures for detached and independent junior college buildings. School boards and superintendents should be wary of any high pressure plans to secure funds for such structures. Until our community programs are carefully worked out on the basis of the more logical six-four-four plan, all available funds should be concentrated on much more obvious elementary and early secondary school needs.

School Politics

TO THOSE who sympathize with the plans of the political scientists for the abolition of the school state, elimination of a popularly elected school board and the integration of education as just another municipal activity, we recommend thoughtful study of the Chicago situation. Here the aim of our political theorists with their mania for centralization and the blueprint pictures of efficiency has been partially achieved. The mayor does not appoint the superintendent but he does almost as well by appointing the board of education. What is the result?

Prior to 1890 there was some semblance of educational independence. Since the administration of Supt. Albert G. Lane beginning in that year the school system of Chicago has been definitely controlled by the city hall and the mayor's political machine. During this period of almost half a century, some men of unusual talent have been appointed to the board of education but in only isolated instances have any of them dared to exercise independence. Their orders were written in the city hall and they performed their given tasks

perfectly. Despite the leadership of a number of outstanding superintendents, it has been impossible to make much progress in Chicago. Political expediency and political manipulation have governed. Superintendent after superintendent has been gradually worn down and tossed out of the window.

The latest victim of this rule of politics was Dr. William A. Bogan. Just as soon as he attempted to operate the schools for the children instead of the politicians, the board began to circumvent him. He was gradually stripped of his power through the process of using "short circuiting" personnel. The pliant representatives of the city hall and county political gangs within the system made it possible. The entire school system is honeycombed from bottom to top in all of its manifold phases with the insatiable demands of politics. There are a few independent souls among the principals and teachers who place professional ideals higher than city hall demands at the sacrifice of personal advancement. A superintendent who tries to maintain his professional integrity has a life expectancy of four years.

There is only one way in which the Chicago schools can be divorced from politics. If a sufficiently aroused public opinion can be created, it will be possible to remove the schools from political control by establishing a school district independent of the city and county political organizations.

Education Needs Representation

AS A result of stimulation by the National Resources Committee, there have been established in the majority of states general planning boards concerned with the study of the resources of each state and the progressive development of a plan for their constructive use.

The work of these various planning commissions naturally touches upon social organization, especially in the field of government. Since educational government, through the medium of the school state, covers an unusual field of interest and activity comprising up to one-third of the totality of all governmental service, it is highly desirable that professional education should be represented on all of these state boards. While several states have already met this need by inclusion of the state superintendent or some other qualified educational officer, education is not now represented on the majority of these boards. It seems almost absurd to be forced to call attention to the vital importance of education in any planning program. Yet, unless the professional interests succeed in convincing certain governors of the need, the educational interest is certain to be neglected.

The Editor

The Community Takes the Good of This School



Once inside this inviting building, it is not easy to leave.

By
WILLIAM L. MOORE

the evening is often granted the day school group for such occasions as scholarship and athletic banquets, senior class and dramatic club plays, and commencement exercises; also, there are dances, athletic contests, gymnasium exhibits, open house events during Education Week, music department concerts, and P.-T. A. parties and programs.

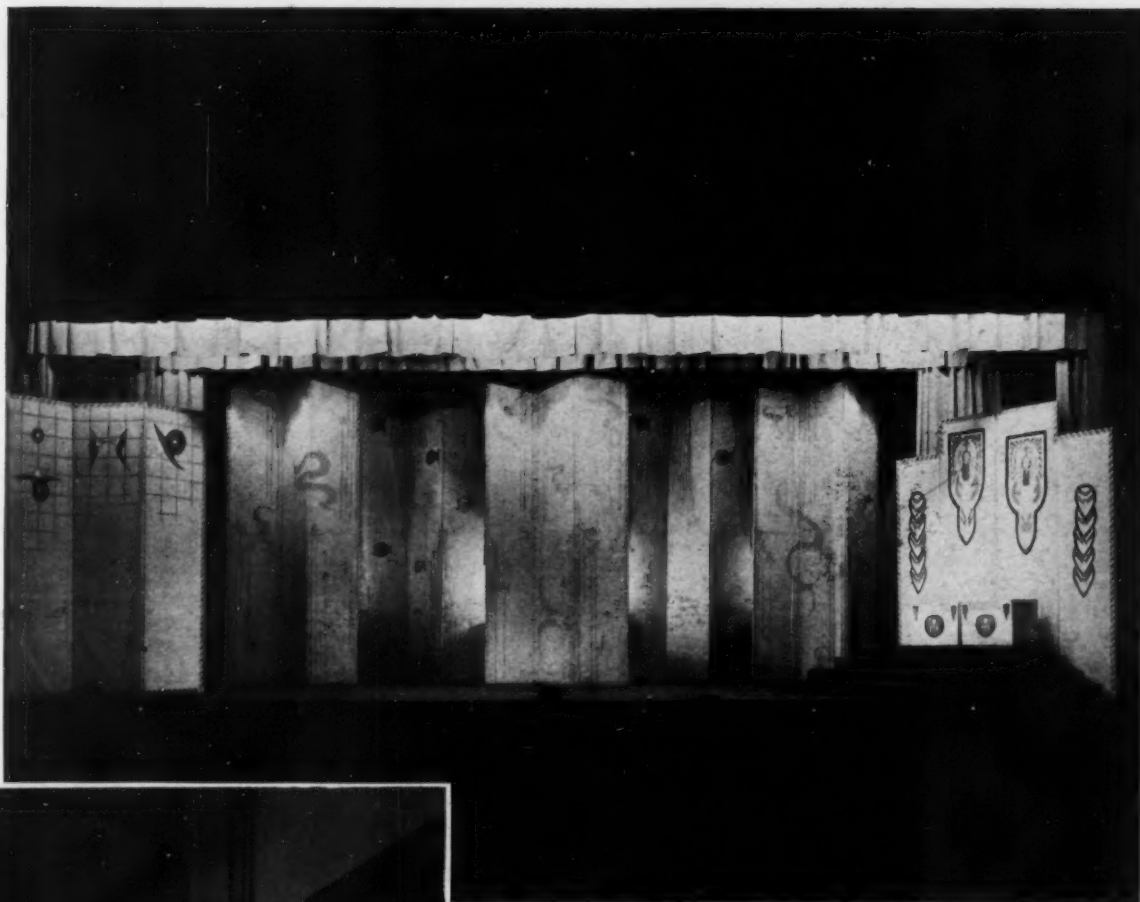
John Hay High School is a large building. It has fifty-nine classrooms with seating capacities ranging from thirty to eighty-eight, three large study halls, a library, a dispensary, a visual education room, a third floor lunchroom accommodating 700 at one sitting, a tea room and two gymnasiums. The gymnasiums are separated by folding doors and when thrown together will accommodate 1,500 spectators at athletic exhibitions. There is also an auditorium with a seating capacity of 1,800 and with a stage, 72 by 43 feet. The stage is equipped with a preselective remote control switchboard. Sound motion picture equipment permits the showing of talking pictures in the audi-

BACK in the days of the little red schoolhouse the use to be made of a school building was not one of the community's problems. Now when we are attempting to be economically efficient, we hear many questions as to whether the community will make sufficient use of an expensive building and its expensive equipment to justify its existence.

In the hope that it was satisfying a definite need, in the fall of 1929 the Cleveland board of education

opened for the use of the community the John Hay High School. Since that time many groups have demonstrated the wisdom of this action.

The entire school and its facilities are reserved for the day school from 8:00 a.m. until 5:30 p.m. on regular school days. In these days of P.-T. A. and extracurricular activities, the day school group includes not only the 3,500 pupils and their teachers, but also their parents and friends. Permission to use the building during



Dramatics in the making at John Hay High. The stage, at the top of the page, is set for a Chinese operetta. But the play can't go on without the help of the pupils back stage.





Through the doors of this community center some 882,000 persons annually pass. An oval playfield covering $1\frac{1}{4}$ acres adjoins.



torium and the public address system permits the entire school to hear simultaneously any program. Besides all of this, there is an oval play field that covers 1.25 acres.

Although this day school group seems to furnish activity enough to warrant the erection of a fine school on a beautifully landscaped plot of 8.6 acres, other groups find it equally useful.

Abraham Lincoln, who walked miles to borrow one book and then read it by the light of a single candle, did not surpass in persistence in his search for scholarly attainments many of the men and women who attend the John Hay night school. The Cleveland Extension High School, with an enrollment of about 1,500, occupies the building from 6:30 to 10:00 p.m. on Monday, Wednesday and Friday with a regular program of classes in secondary academic and commercial education. This program

serves the needs of those who for some reason found it necessary or desirable to postpone their secondary school education for their later years.

The Cleveland Extension High School is a regular high school chartered by the state. A diploma from this school has the same value as the diploma from any other Cleveland high school. During the last five years, 520 high school diplomas have been granted to these adults.

Another group in the community is served by this school—a large group of hopeful musicians. For them a music school is conducted on Saturday mornings, from 8:30 to 12:00. About 500 pupils are given private or group instruction by well trained music teachers, many of whom are members of the Cleveland Symphony Orchestra.

What community can be physically and socially fit without adequate recreation? To this school building, another group of about 500 men and women comes on Monday, Wednesday and Friday evenings to obtain instruction and practice in golf, tennis, badminton, tap dancing, gymnasium work, contract bridge and horse shoe pitching.

Besides the dances, banquets, lectures and commencement exercises for the various night school groups, the building is requisitioned for such purposes as the Ohio Sectional Commercial Contest, the department of physical welfare exhibition, the journalism convention, band, orchestra and choral contests, university entrance examinations and athletic contests. Even on Tuesday, Thursday and Saturday evenings the building is used when special permission is given by the board of education and a regulation hourly fee is charged. Some of these occasions are as follows: Western Reserve University lectures, Ohio District Walther League Meeting, civil service examinations, meetings of League of Women Voters, political meetings, dances and musical recitals, city election booth, banquets and Y. M. C. A. and community athletic contests.

John Hay High School is one of

Cleveland's most desirable and most accessible school buildings. It stands at the corner of East 107 Street and Carnegie Avenue within one city block of five main car lines and one crosstown street car line. It can be reached from the most remote section of the east side in thirty-eight minutes. It takes its place in the cultural center of Cleveland.

In its service to the community, as a true community center for the 882,000 persons who pass through its doors yearly, John Hay High School does credit to the man for whom it was named, the man who served as secretary to President Lincoln and later served as secretary of state under both President McKinley and President Theodore Roosevelt.

Can Any English Instructor Teach High School Journalism?

By GLENN HOLDER

SINCE 1850, when the first high school newspapers were published as extracurricular projects by a few New England high schools, notably by the Boston Latin School, there has been a steady growth in the number and quality of high school newspapers.

Most good schools now issue weekly, biweekly, or even daily newspapers which vie in quality with metropolitan dailies. Taking advantage of the technical advances in the field of printing, the school newspaper is now produced quickly and efficiently.

Progressive high school principals no longer permit their schools to be advertised by a shoddily edited newspaper; they demand well written news articles, editorials and feature stories, which present the school in its proper light to the public. The school paper is an important device through which the merits of education can be sold further to the public. If properly written, it is the true reflector of all school life—academic, vocational, social and athletic—giving each of these due credit for its contribution. It is taken for granted that the journalism teacher is also the adviser of the high school newspaper.

Ninety journalism teachers representing high schools in cities of 10,000 or over in all parts of the United

States were asked the following questions: (1) Should the state require licenses to teach high school journalism and to supervise a high school newspaper? (2) If so, how many semester hours in journalism should be required?

Sixty-one, or 67.8 per cent, answered unreservedly, "Yes," to the first question, pointing out repeatedly that since journalism is such a popular subject in high school it should be properly taught. Many stated that the belief that any English teacher can teach journalism is erroneous.

"It would certainly be better than the trial-and-error method which I used," said one teacher.

Twenty, or 22.2 per cent, said that such requirements were not necessary, most of them explaining that journalism is too new for that kind of standardization and that it would simply be another way to fill the schools of journalism in universities. Eight felt that the state probably should require licenses and one was doubtful.

Only forty-three answered the question regarding the number of semester hours of training they considered necessary. The median number of semester hours they believed necessary for proper training was nine. The range was twenty-eight.

Now a High School Course in World Relations

By VICTOR E. PITKIN

THE accepted principle of American government is that of a democracy. The acceptance of this principle means that American citizens have in their own hands certain choices to make in regard to foreign policies.

They must choose, for example, between a policy of high tariff, low tariff or tariff bargaining. Within the past year they have made a choice in respect to the World Court, and it is possible that this issue may again confront the American people. They must soon make a choice in regard to our enforcement of the so-called "open door" policy in the Far East. Each administration is confronted with a choice of policies in respect to the Latin American situation. Our government officials have been trying to work out a policy of neutrality that will meet the approval of the American citizen. Every year there arises the question of voting funds for the support of public defense.

Toward More Intelligent Voters

These are but samples of the many diplomatic problems that in increasing numbers confront Americans.

The skeptic may reply that these questions are technical and in a large measure handled by our State Department. This is true, but it must be remembered that this department relies upon the good will of the people to remain in office. If there were a broader understanding of the facts and principles involved, the people could better determine whether certain policies were the wiser ones.

The diplomatic situation throughout the world at the present moment is delicate. A struggle may break out

in Europe, or events may bring about an acute situation in the Far East. If a general war should come, what part would America play? This question must be answered by American citizens when the time comes. Further than this, a whole host of problems regarding America and the international world must be solved.

Not Internationally Minded

Thus far most of the newer courses in high school lay a greater emphasis upon local and national problems than upon international situations. There has been comparatively little attention given to an analysis of the causes of wars; methods by which disputes may be settled; the policy of isolation from Europe; the policies of the "open door" and the Monroe doctrine. Pupils graduating from high schools have had little training that will enable them to understand the diplomatic situation today.

We must face the fact that America has changed in the last quarter of a century from an adolescent nation to a great world power. We are approaching a national maturity that calls for mature decisions. Are the traditional policies adopted as a youthful nation the wiser ones to follow as an adult nation? Shall the boys and girls in the public schools today, who tomorrow will become voting citizens, face these problems blindly without an understanding of our past policies, of the principles involved, and of the results that any given policy may bring?

Although a larger and larger part of our electorate are high school graduates, it must be remembered that less than one-sixth of those who

graduate from high school go to college. Therefore, if the training in international affairs is to be given a broad base among the electorate it must be given in public high schools.

What should be the place of such a course in the curriculum? Its very nature implies a frank discussion of policies. Therefore, it seems wise to have it near the close of the high school career when the pupils have reached a greater maturity. In view of the numerous other desirable courses that pupils may take, this course should not occupy more than one-half year.

What would be the nature of such a course? I should like to suggest the following topics, which can be adequately discussed within this time allotment: (1) causes of international disputes; (2) methods by which they may be settled—diplomacy, arbitration, League of Nations, World Court; (3) sore spots of the world—Latin America and the Monroe doctrine, Japan, the Far East and the "open door," Europe and the Versailles treaty; (4) traditional foreign policies of the United States, and (5) possible future policies.

Case Study Method Recommended

There are a variety of ways of treating such material. Whatever method is used there must be some emotional reaction to see the need of studying these policies. One way of securing this reaction, and at the same time to bring about a greater understanding of international problems, is to have the whole course interspersed with case studies giving as dramatically as possible the points of view of each nation involved.

Such a course would, in due time, bring about an informed electorate.

Unfortunately, I Like Teaching

Lament of a California School Teacher

UNFORTUNATELY, I like to teach school. I like to work with young people, like to enter into their activities and lives and aid in directing their activities. I like to watch them develop and to have a part in bringing about that development, physically, mentally and morally. I truly believe that I help to direct their thinking and actions so that they will be able to live fuller lives and become assets to their communities as well as to themselves, and desirable citizens wherever they chance to live.

Yet, the word "unfortunately" used above is not ill advised. The chief reason for this is the recent administrative activities that members of boards of education have taken unto themselves.

Freaks on the Board

For some unknown reason, communities have been prone to put the freaks who exist in their midst on the school boards. Possibly this is not true in the urban centers, but it seems to be a fact in the smaller, rural places where schools are conducted. Perhaps the present attitude of these boards is due to our present economic strain. At any rate, they have in many cases taken over the administrative functions of the school and left the hired administrator out of it, as far as many things about the school are concerned.

It is now a current practice for a teacher to work a year or two in a school system, receiving all the while the commendation and the plaudits of the school administrator, only to find his throat cut professionally at the board meeting at which teachers are hired for the ensuing year. This may, or may not, be done over the protests of the school administrator.

Members of the school board pub-

licly deplore the fact that hordes of school teachers visit them, making applications for positions when they find that a vacancy in the school system exists, but their actions seem to indicate that they secretly enjoy this immensely. It gives them the opportunity to exercise the authority that they have taken over in the matter and a sense of power that otherwise they would never have anywhere, and they revel in the experience. A teacher has assumed to them the proportions of a worm, which dares not turn.

This very practice of teachers making applications to board members, many times ignoring the school administrator, shows how far things have gone. It is an entirely unprofessional practice, and yet it is practically the only way in which a teacher can secure employment. Rarely will a school board member comment on a teacher's work during the school year, one way or another. The board members wait until rehiring time comes, and then show their disapproval by dismissal, oftentimes with no explicit reasons.

Unqualified to Judge Teachers

As a matter of fact, few of these board members are able to judge anything concerning a teacher professionally, as they have not had the school experience necessary to render such a judgment, nor do they take the opportunity to observe the teacher in action sufficiently so that they have first hand knowledge of the work that is being done. Further, they do not have an adequate conception of what the school is to the community, or what it can be, or how it can be of greatest service. One member usual-

ly dictates to the remainder of the board, and in too frequent cases he is the one least qualified.

To be specific, there is an individual who has had a great deal more formal academic training than the average school board member has had. He attended a semester or two at one of the great universities of our state before succumbing to the inevitable. However, since that time he has been, in his own estimation, a "college man," and he has succeeded in having himself elected as a member of a school board of trustees.

The Local Mussolini

His only visible means of support are trap drumming with a tramp orchestra, announcing at prize fights, and being paid mileage by his school district when he ranges afar to spread his gospel of schools as they should be. He dictates absolutely the actions of his school board and seeks to dictate the policies for schools in general over a vast area of the state. In his own estimation, he is a great public speaker, and he talks with equal conviction and fluency whether addressing the gang at the local pool hall or the state legislature. His brass is supreme, and he is constantly on the go (he collects mileage for this) to tell communities what they should do in order to run their schools properly.

It is an indictment of the personnel of the school boards in the communities where he is asked to propound his gospel, as the school of which he is the Mussolini violates the school law in many respects. Among these, there are teachers in his school who are teaching subjects which they are not certificated to teach. Scarcely

an article is bought by the district that a member of the board does not profit directly or indirectly by it. The school runs a supply store in direct violation of the school code. In addition, the school plant is almost obsolete, yet scarcely anything has been paid on the principal of the bonds that were voted many years ago to build it. However, this man puts on his bold front, and tells all and

sundry how to run their schools and conduct their school business.

School teaching can never become a profession in any sense of the word as long as the present means of local control is in effect, in spite of the fact that any move made to change it would be considered revolutionary and undemocratic. Nor can schools render their fullest service and fulfill their mission, by the same token.

were in favor of the law; 56.3 per cent were in favor of its repeal, and 35.6 per cent were in favor of teacher tenure, but were opposed to the law as it operated in the township schools. Approximately one-fourth of the town superintendents were favorable toward the law, about the same number were opposed, and nearly one-half were in favor of teacher tenure but recommended changes in the law.

Why were so many superintendents opposed to teacher-tenure legislation? An examination of the data obtained by interview with the superintendents and presented in Table II will reveal the answer. Each year during the period of the investigation teachers and principals with four or more years of continuous service in a system were dismissed because of the tenure law.² In the words of a superintendent, the trustees were "afraid for a teacher to be 'saddled' on a community for life." Rural opposition to the law increased after 1930.

In a small school district a teacher on a permanent-tenure status will possibly be employed in one position or in one school until he retires. The residents of the average rural or small town community will probably be opposed to tenure for teachers when such a possibility exists. A solution to the problem may be found in the consolidation of small districts, thus permitting the transfer of a permanent-tenure teacher to another school in case a change seems desirable.

Furthermore, the substitution of indefinite tenure for permanent tenure is worthy of consideration in legislation designed to protect the teacher's position. The term "permanent tenure" reacts unfavorably in the mind of the layman. "Indefinite tenure" suggests at least that there may be a way to dismiss an inefficient teacher.

¹The tenure law was revised in 1933 to exclude the teachers and principals in the township schools.

²Although the 1927 law specified that "any person who has served or who shall serve under contract as a teacher in any school corporation in the State of Indiana for five or more successive years, and who shall hereafter enter into a teacher's contract for further service with such corporation, shall thereupon become a permanent teacher of such school corporation" (Laws of the State of Indiana, 1927, p. 259), some of the trustees dismissed members of the teaching corps after four years of service in order to permit their reemployment at some future date without permanent-tenure status.

Opposed to a Teacher-Tenure Law

By DONALD L. SIMON

DURING a recent investigation of turnover among teachers in Indiana, the county and town superintendents were interviewed concerning their attitude on a teacher-tenure law.

These superintendents had had an opportunity to see the law of 1927 in operation in the smaller systems.¹

As shown in Table I, only 8 per cent of the county superintendents

TABLE I—ATTITUDE OF COUNTY AND TOWN SUPERINTENDENTS IN INDIANA ON A TEACHER-TENURE LAW

Attitude	Superintendents		
	County	Town	Total
Number for	7	20	27
Per cent	8.0	24.1	15.9
Number against	49	22	71
Per cent	56.3	26.5	41.8
Number giving qualified statements...	31	41	72
Per cent	35.6	49.4	42.4
Total number	87	83	170
Per cent	99.9	100.0	100.1

TABLE II—NUMBER OF STAFF MEMBERS DISMISSED BECAUSE OF THE TENURE LAW AFTER FOUR OR MORE YEARS OF CONTINUOUS SERVICE IN INDIANA TOWNSHIP AND TOWN HIGH SCHOOLS

Year of Dismissal	Number of Staff Members	
	Township	Town
1927	46	2
1928	58	6
1929	45	17
1930	42	7
1931	66	8
1932	113	2*
Total dismissed because of tenure law....	370	40
For all causes.....	775	90

*The number dismissed in the town high schools in 1932 because of the tenure law was not obtained.

Reporting Pupil Progress

Some devices that are satisfactorily replacing the old-time report card

By WILLIAM H. BRISTOW

IN HELPING school, parents and pupil to evaluate growth, it is essential that a plan of reporting be developed which not only will further the positive objectives of the school but will also prevent conflicts. Conflicts occasionally grow up around competition, satisfactory and unsatisfactory work, inability of individual pupils to adjust themselves, and strained pupil-parent-teacher school relationships. At best it is difficult to interpret in meaningful, comparable, concrete and objective terms what goes on in connection with the learning of an individual pupil.

What Reports Should Accomplish

In all of his work the pupil should constantly gain in ability to solve his own problems with the help and cooperation of his teachers, his fellow pupils and his parents. He should learn to face problems squarely, to evaluate impartially and to discover solutions to his problems. The most valuable outcomes in education cannot be expressed in terms of subject matter covered; they are dependent rather upon the development of emotionalized attitudes.

A reporting system should aid the pupil to develop wholesome attitudes toward himself and his work. It should give him the feeling of security that comes from a realization that he is actually making progress. It should develop in him an objective impartial attitude toward his own development so that he may clearly see in what directions it is necessary to make improvement. It should further create a desire for such improvement.

Reporting should contribute to group growth by making sure that the individuals in the group are not placed in a highly competitive and emotionalized situation in which the

only way to secure the recognition is through "beating out the other fellow." The responsibility of each individual to help other members of the group should be recognized and the powers possessed by each will be made a contributing factor to group success.

Reports should aid the parent to understand the strength and weaknesses of his child, his aspirations, the types of activities in which he has natural interest and ability and the ways in which the home can contribute more effectively to his growth. They should foster mutual confidence and partnership between parents and children.

Four Guiding Principles

The reporting process should bring to light both individual and group difficulties and should establish that mutual respect and determination so essential for satisfactory learning. Likewise a helpful relationship between home and school should be fostered. The responsibility of the school cannot be discharged by merely reporting that the child is doing unsatisfactory work.

A reporting system based on the foregoing principles will (1) avoid situations in which the pupil can most easily solve his problem by any form of dishonesty; (2) create a situation in which the home and the school will spontaneously cooperate to further the social, emotional and intellectual well-being of the child; (3) be so drafted that the child will exercise to the fullest extent his several abilities through the removal, as com-

pletely as possible, of harmful competition with other children in his environment, and (4) constantly encourage the pupil to excel his own previous record.

The following are characteristics of a satisfactory reporting system:

1. Delineations of traits should be stated positively.
2. Individual differences should be recognized.
3. The system should foster cooperation between home and school.
4. It is important that school and parents learn to recognize evidences of growth.
5. Items reported on should be pertinent and meaningful.
6. Accuracy demands that school data be objective.
7. Much educational data are essentially confidential and should be used only in a personal interview.
8. The report should consider the whole life of the pupil rather than academic achievement only.

Varieties of Report Cards

A report card is usually a card, folder, booklet or any other form, except a form letter, that is or can be used by a school in reporting pupil success to the parents.

The report card is given to the pupil who takes it home for parental inspection and sometimes "approval." One of the greatest difficulties now apparent is the fact that there is often no understanding as to what the marks mean. This sets up conflicts between pupil and parents, and frequently between parents and school.

It is usual to issue reports at reg-

ular intervals. This practice delays until the regular report period the making of a report rather than giving it at a time that would, in an individual case, be most effective.

Practically every report card that can be drafted will be one of two kinds. It may be brief, concise and objective but the entries on the card are not items which constitute a "report"; instead, they are items of a confidential nature which, properly used, serve as the basis of a judgment or report rather than a report itself. In this category belong all percentile grades, rankings, percentage marks and even some of the symbolic grades.

The folder or small booklet type of report card, which couches the report in terms of accurate observations about the learner, his habits and character traits, must of necessity become a much larger booklet or folder than is now in ordinary use. A report card alone is not adaptable to the requirement that home-school communication is essentially a "two-way" system.

Use of Informal Letters

One of the devices with which a great many schools are experimenting at this time is the informal letter. These may be divided into three types: (1) those written primarily as a group project in the class in which group information is included and plays a large part; (2) those written by the individual pupil supplemented with a postscript by the teacher or principal, and (3) those written entirely by the teacher or principal.

These letters should reveal to the parent that a careful study of the child has been made, that certain definite improvement or nonimprovement is going on, the extent to which growth has characterized the work of the pupil, and other related information both with regard to the success of the school or group and the individual pupil. Various techniques have been used in developing these letters and the plan that is used in an individual situation will have some

bearing upon prevailing local conditions. Pupils will need much guidance in writing such letters to parents. In the lower grades most of the statements probably will be dictated and the group aspect will play a large part.

Another effort in the direction of developing a satisfactory reporting situation is to be found in a plan developed in the Pasadena schools.¹ In this report card one report is compiled for the entire grade. The report is made primarily as a result of the group thinking of the pupils. Such a report also provides for the teacher's comment and the comment of the parent.

Pupils Write Own Reports

A pupil's letter to his parents provides an excellent form for a report. Teacher's or principal's comments are added.

Since such letters are flexible in both form and content, little can be said, except to suggest items the letter might include. Such items are as follows:

1. Specific acts, attitudes, accomplishments or habits which the school commends.
2. Attendance and tardiness data.
3. Activities in which improvement is desired.
4. Successful activities and satisfactory habits, skills, attitudes.
5. Suggested reasons for failures and success and methods of improvement.
6. Health; personal data.
7. Improvement in habits, attitudes and skills.
8. Satisfactory habits, attitudes and skills.

In some of the experiments that have been developed no comment is placed on the report of the pupil unless it is understood and accepted by the pupil and unless he is willing to have it put there.

The report can be made to the home by a letter from the teacher, principal or school office issuing the letter over the principal's signature.

¹Ball, Grace, *An Evolutionary Report Card*. The Progressive Education Association. February, 1935. Pp. 89-94.

It is recommended that such a letter be posted and not transmitted to the home in any other way.

These reports should call attention to pupils behind in their work at a time sufficiently early to effect constructive remedial treatment. The letter, owing to its informal nature, many times reveals to the principal facts that he would have been unable to secure from any other source. The pupil, the teacher or the parent will unconsciously give information that is valuable to the principal. For example, in the letter of the pupil to his parent, the principal may consider the statement concerning biology to be worthy of investigation. The teacher may be confining the work of the class too much to the textbook. If the principal is not entirely familiar with teaching procedures in this class, he will include it upon his next visitation.

The informal letter is not superior to and can never take the place of the personal conference.

Use of Personal Conference

The personal conference between teacher and parent or principal and parent is becoming more widely used each year. It is true that some form of conference with parents has been in use since the origin of the public school. Most of these interviews were initiated by the irate parent prompted by the old time school marking system or by complaints from the boy or girl. While this type of conference still plays a part in school supervision, it has decreased because of the fact that in most cases the parent is kept in closer touch with the work.

The tendency, at present, is not to wait for intermittent visits at the thought of the parent but for the school to solicit conferences. Through an adequate cumulative record system² following the child's progress through the school, the principal and teacher have an excellent opportunity to evaluate the individual pupil's achievement. At intervals a frank dis-

²See Bulletin 81, *Cumulative Pupil Personnel Records for Elementary and Secondary Schools*, published by the Pennsylvania Department of Public Instruction, for such a record.

cussion by the principal, guidance counselor or teacher with the parent concerning the good as well as the poor qualities of a pupil's work is extremely beneficial. The parent forms an intelligent contact with the school. He becomes interested in the work of the school. He sees the relation of the school's program to his child. Thus he becomes better able to assist in the child's progress in school and cooperate with the work of the school.

Home Visits Are Helpful

The conference with the parent includes a discussion of all factors relative to the pupil's progress. His physical condition as revealed by the school's medical service and his home surroundings as revealed by the social service of the school have a bearing. His attendance, his interests, his activities within and without the school, his ability in relation to what he has done in school work, his future activity are items that are of primary importance to most parents. A close tie-up with the social and health agencies within the district furnishes valuable supplementary information.

When serious difficulties are being encountered by the pupil, a visit to the home by the counselor, visiting teacher or teacher is necessary. Many schools arrange the program of visitation so that each teacher has only fifteen or fewer visits to be made each year. Some visitation is necessary to any adequate program of understanding the child.

In order that service of this type can be expeditiously performed, some schools file a copy of the permanent records by families. Reports of individual pupils are kept in a family folder. These are maintained in this order as long as there is an educable child, under sixteen years of age or in school. Since family situations are subject to change, revision at frequent intervals is necessary. The family information with a history of contacts and treatment is indispensable in dealing constructively with the home problem of children who are also problems in school.

There is no method of reporting pupil progress that is as flexible as the personal interview. By its use the communication between parents and teacher is most fully developed. Even a certain degree of rapport will develop in some instances. Indeed, it serves many important functions, only one of which is the tendering of a report. It is an excellent opportunity for educational, vocational and character guidance of the highest kind.

Teachers in our schools do not know enough about the whole environment of the learners whose educational environment they purport to manipulate. A friendly visit to the home of each learner during the first month of the school term or as soon thereafter as practical is essential to this knowledge.

What educational purposes does this preliminary visit serve? The teacher learns where the child lives. It is valuable, for example, to know that the pupil's residence is the only painted one in a row of frame structures, that it is surrounded by flowers, or that it shows, on the other hand, signs of neglect. The teacher learns of the weaknesses and strengths of the home, the attitude of the parent toward both child and school and of the child toward the parent and the home—in short, the ideational environment of the learner.

Common Interests Discovered

In many situations it is not sufficient that two adults have an interest in a child, one as parent and the other as teacher, so that a friendly, eager cooperation will result. More ties are frequently necessary. Sometimes, common interests are discovered such as religion, nationality, mutual friends, fraternal or other memberships, flowers, pets, "peeves," travels or hobbies.

Many persons welcome interesting differences, esteeming individuals as friends because of certain differences. For example, in an Eastern Pennsylvania city a strong friendship exists between a musician and a machinist, because the musician will play for his

friend who has no manipulative skill in music and is in turn benefited by having his instrument maintained in good mechanical condition; something he could not do for himself. Many persons have avocational interests, which if they realized it, would considerably widen their circle of friends, and this is peculiarly true of teachers. All of these contacts with the home will engender a sense of security on the part of the learner in the school environment in which the teacher is frequently the focus. It is needless to say that really lasting character cannot be grown by the child without this security.

Group Interviews Are Possible

In smaller school systems where the services of a school nurse or a visiting teacher are not available, the important work of these offices settles upon the teacher. Follow-up visits after medical inspection at the school or after receipt of a report of illness of a pupil are always appreciated whenever there is something that deserves consideration by the home. Many parents may not be acquainted with community resources available to them in the event of certain kinds of illness. The teacher who can easily establish contact with the agencies in control of these resources will frequently be repaid for her efforts in lasting human values of which friendship is but one. In some instances the teacher may have to point out the advisability or even the necessity of certain kinds of medical correction unknown to the parents. When, in the ordinary school routine, the teacher is not a stranger in the home, this aspect of the professional activities of the teacher in the smaller communities is made much easier.

Teachers will recognize, of course, that most of the interviews for the purpose of reporting pupil progress will be held in the school. In fact it is much better to do this because of the availability of the school records, particularly the learner's cumulative record. The interview in the school will tend to be briefer and more busi-

nesslike than the interview in the home. This makes for economy of time, which will be all too short.

The conference in the school would, ideally, be conducted in the private office of the dean of instruction. In many schools where there is no dean, the home room teacher can conduct the interview. In the event, one of two arrangements must be made; either a suitably furnished conference room is provided or the conference is held after the school is dismissed.

The furniture of the schoolroom is designed for another purpose, and the proper atmosphere for the reporting conference is hard to create in a large, empty schoolroom. The time of the interview is limited in practically every case to the later portion of the afternoon, which is certainly not the most convenient part of the day for the housewife. For her, the early afternoon hours would be best. But it is not only the mother who will be interested in and affected by the reporting conference. For the father afternoon hours are usually not welcome. These and other considerations point to the evening as a likely time for a conference with parents.

When we consider the facts that the interviews need not be lengthy and that they need not be individual, the question of the availability of time for these interviews becomes much less formidable. The technique of the group interview can be used in some situations and at least partially whenever a sufficiently homogeneous group problem in educational guidance presents itself. For example, consider ten children in a home room whose progress is satisfactory, who exhibit adequate social and emotional adjustment to school environment, and in whom no outstanding guidance problem presents itself. There is no reason why the parents of all ten of these children cannot be invited to the school for conference at the same time. In fact, cogent arguments could be presented which, among other things, would say that ten conferences that say the same thing would be wasting nine times the time for one of the conferences.

Student Rule in a Junior High School

By T. R. EHRHORN

A GREAT deal has been said about the merit of a plan of school government in which the pupil himself definitely participates. We have introduced a plan in our school that has proved very satisfactory.

The 550 pupils in our school are organized on the home room plan. The eleven home rooms accommodate groups of fifty-five pupils each, on the average. Each group elects three officers to represent it during the year. These three members, a president, vice president and a secretary, automatically become members of the student senate of thirty-three.

In order that the principal and home room teachers may remain in the background as much as possible, the student senate at its first regular meeting nominates candidates for the office of president of the entire student body. These pupils are nominated on the basis of suitable qualifications for this office. Since the duties of the office are numerous our council this year decided to elect two presidents, a girl and a boy, who alternate as presiding officers. In addition to presiding at council meetings, they preside at all school assemblies.

How the Plan Operates

It is important that the presidents be the choice of the pupils themselves. I cannot describe how enthusiastically our student body receives the announcement of the election of their choice for president. They get a personal satisfaction out of knowing that they had a part in choosing the successful person.

The newest feature of our plan for constructive student participation in school affairs is the introduction of what we call a student patrol system. It is our plan to have the school operate somewhat as a small community does. The fact that the cooperation of everyone is needed really to make a good school is stressed.

The organization is as follows: All pupils who desire to serve on the patrol make application to their home room president, who keeps a waiting list. Appointments are made for a two weeks' period. There are eighteen patrolmen on duty at a given time, eleven of these being on duty in the immediate vicinity of their home rooms. The other seven are known as specials and are stationed on the stairs and at other points where there is considerable traffic. These pupils are on duty only in the morning before classes pass, at noon and in the evening at dismissal. All patrolmen are permitted to leave their rooms one minute early so they can take their proper places.

Badge of Authority Recognized

Since a complete new list of pupils goes on duty every other week, not less than 324 participate during a nine months' period. Many come back wanting to be appointed for a second two weeks' service. Large buttons, 2½ inches in diameter with "student patrol" printed on them in red letters identify the patrolmen.

When an appointment is made the patrolman is handed a sheet of instructions prepared by the council. This sheet tells him definitely what his duties are and how he is expected to conduct himself when on duty. Kindness and courtesy are stressed above all else.

In two years it has not been necessary to dismiss a pupil from service because of conduct unbecoming a patrolman. All are under the direct supervision of the presidents from whom they get their instructions and identification buttons and to whom they are responsible for the proper carrying out of their duty. At the expiration of each two-week period all those who have been on duty turn their buttons in to the president who issued them and he, in turn, reissues them to newly appointed patrolmen.

Geared to the Intelligent Lay Mind

THE published budget of the Rochester board of education is an unvarnished accounting on shiny paper. It appears each year early in November, two months in advance of the calendar year which it covers. A short form prepared in advance goes to the city council on October 15, is referred together with the budget of the city manager to the finance committee, which holds a prescribed public hearing, and reports its conclusions to the council. Final action must be taken by the council not later than November 15. The council may reduce the board's total estimate but may not alter any items.

By the time of the hearing 25,000 to 30,000 copies of the school budget have been printed and distributed at an average cost of three cents each. Except for those sent to the press, the chamber of commerce and the offices of other organized groups, the copies are carried home by the children of the schools.

Printed on 80-pound coated and calendered paper capable of taking good halftones and of presenting graphs with proper clarity, this budget has appeared in substantially the same form since 1928. It began with twelve pages of letter size and has now increased to twenty. It is made up of illustrations, charts and letterpress. The text has aimed to present the essential facts concerning the budget in simple, straightforward, factual, third-person style.

One page has been devoted to a general statement concerning current income, another to current expenditure, and one page each to the major accounts, namely, administration, instruction, auxiliary agencies, operation, maintenance, fixed charges, capital outlay and debt service. Each

By JAMES M. SPINNING and HAROLD E. AKERLY

of these pages has its own graph of expenditure drawn on logarithmic paper so as to show trends, covering the total period from 1920. The tables at the foot of each page give an analysis of costs over a five-year period, including the projected cost

for the coming fiscal year, broken down into a dozen or more subaccounts.

The discussion of each major account has been limited to about 200 words and has therefore been confined to a simple explanation of the

Current Income

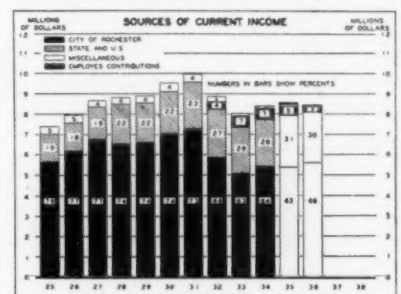
Revenue Items for the Year 1936 Analyzed

Current expenditures are financed from funds raised from three sources: local taxation, state and federal aid, and miscellaneous sales and services. The first two are self-explanatory. The third is largely made up of tuition received from non-resident pupils, registration fees, rental of property, and sale of obsolete equipment and supplies. Since May 1932, these three regular sources of income have been supplemented by the so-called employees' salary contributions.

In the years 1932, 1933, and 1934 all employees receiving more than \$1300 a year returned 10% of their salaries. In 1935 this rate was reduced to 8%. A further reduction to 5% is contemplated in this budget. Those receiving less than \$1040 a year have contributed nothing, while those receiving from \$1040 to \$1300 have contributed on a sliding scale.

In the past decade the Board has not once failed to live within its revenue, and despite the diminished appropriations of the last four years the Board has not only balanced its budget in each year, but in addition turned back to the city treasury in 1932 the sum of \$200,000 received from unanticipated contributions of employees. And after the payment of all obligations in 1934 an unexpended balance of \$166,328.34, arising in the main from

employees' salary contributions larger than anticipated, was returned to the city.



Some estimate of the value of state aid in combination with drastic curtailment of expenditures in reducing local taxes may be derived from a study of the chart upon this page. Even that will not show clearly the fact that the budget for 1936 calls for approximately \$5,600,000 from local taxes, whereas the amount raised in 1922 was \$5,913,000. In short, the amount of revenue to be derived next year from taxation of real property is lower than in any of the last fifteen years save three.

1932	ANALYSIS OF CURRENT INCOME					1936
SOURCE	1932	1933	1934	1935	*1936	
United States	36,754.	28,265.	27,220.	110,000.	20,000.	
Per Cent	.41	.35	.32	1.29	.24	
State of New York	2,380,382.	2,301,002.	2,336,913.	2,555,000.	2,520,000.	
Per Cent	26.77	28.64	27.78	29.80	29.79	
Salary Contributions	346,508.	537,675.	546,315.	446,000.	270,000.	
Per Cent	3.90	6.94	6.49	5.20	3.19	
Miscellaneous	277,039.	112,515.	90,921.	84,000.	50,000.	
Per Cent	3.12	1.40	1.19	.98	.59	
Lunch Rooms	119,299.	None	None	None	None	
Nonresident Tuition and Registration Fees	92,929.	90,164.	75,593.	60,000.	40,000.	
Rental of Books	19,542.	None	None	None	None	
Rental of Property	5,080.	4,473.	5,460.	4,000.	2,500.	
Unclassified	40,189.	17,378.	18,868.	20,000.	7,500.	
Total—Other than Local Tax	3,040,683.	2,999,437.	3,010,369.	3,195,000.	2,860,000.	
Per Cent	34.20	37.33	35.78	37.27	33.81	
City of Rochester Tax	**5,850,775.	5,034,231.	*5,402,851.	5,378,231.	5,599,944.	
Per Cent	65.80	62.67	64.22	62.73	66.19	
Total Income	8,891,458.	8,033,688.	8,413,220.	8,573,231.	8,459,944.	
Per Cent	100.	100.	100.	100.	100.	

*Partially estimated.

*Budget.

**Received from employees' contributions and unexpended: \$200,000.

*Includes capital grant of \$90,000 % John Marshall High School (1.05%).

*Received from contributions and unexpended: \$166,328.

48

function to which it corresponds and explanatory reference to the figures presented.

In addition to the principal accounts, similar treatment has also been given to the building and site budget and to pupil enrollment. Each year the first page has been devoted to a summary of the essential facts and the last page to certain points of especial current interest, for example, teacher salary contributions, the effect of state aid, differences in per pupil costs. From time to time the board of education has used this page to say pertinent things with regard to the advantages of a pay-as-you-go policy.

The immediate purpose of the publication has been to put into usable

reference form authoritative figures on costs.

Over a period of years the publication of this type of budget has seemed to be a good means of developing an informed public opinion with regard to the schools. It has certainly provided significant data. For one thing, it has helped to reduce the number of myths about school expenditure by making it possible for those who really care about authentic information to put their hands on it. It has become increasingly the habit for all concerned to talk about the same facts and figures. The annual practice of laying all the essential facts before the public of necessity forces a review and discussion of problems and factors in which the

public is quite naturally interested.

The clear analysis of expenditures and income dictated by such an annual presentation has made the members of the staff conscious at all times of trends. Through the mere fact of publication, and quite aside from technical and internal control, the practice has served to check expenditures.

As an example, a few years ago it became evident that the telephone bills of the board of education were on the up and up, while the total expenditures themselves were on the down and down. The printed budget made the obvious course even more obvious.

It is only fair to admit that the budget has been criticized both by teachers and patrons as too technical, particularly as lacking in drama and heart appeal.

Some slight gesture in the direction of meeting this criticism has been made in the budget for 1936, which includes a five-page preface in which the seven cardinal objectives of education as stated for the secondary school are discussed in 1,000 words and twenty pictures; yet even here there has been an effort to avoid all special pleading.

There are approximately 50,000 children in the Rochester schools. The budget reaches approximately one-half of the homes. Some principals have questioned the wisdom of distribution in the homes of the foreign-born; others have questioned the possible resentment from omitting such distribution, the cost of additional copies being small.

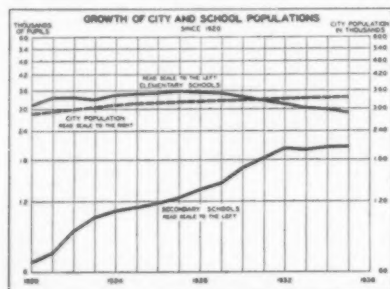
Obviously there can be no general duty budget. On the whole, the statement geared to the intelligent lay mind seems to be the soundest. It is doubtful whether any budget explanation could be made simple enough to be comprehended by the unintelligent and still be a budget explanation.

Now the budget itself is not made up *de novo* each year from estimates compiled by each director, each principal and each engineer-janitor. In short it does not assume a periodic re-

Pupil Population

Decrease in Total School Population Continues

In September 1932, the population in the regular elementary and secondary day schools reached an all-time peak of 51,311 pupils; in September 1933, there were 50,332, a decrease of 979; in the same month of 1934 there were 50,028, a decrease of only 304 as compared with the previous year. In September 1935, the number of day-school pupils belonging



dropped to 49,258, a decrease of 770 in comparison with the corresponding month in 1934.

Changes in school population have apparently followed during the past year the general trend of the last decade, which has been towards successive increases in secondary school population combined with equally steady decreases in the membership of the elementary schools. In September of this year the population in the junior and senior grades

of our high schools reached the highest point on record with a membership of 20,544 pupils. The growth of 312 over the preceding September may be compared with a growth of 232 in 1934 over 1933.

In the elementary schools the population has fallen to 28,714, which is lower than in any year since 1920. And the loss during the year of 1932 is greater than the loss of 536 a year ago; 873 two years ago; 929 three years ago, and even the significant loss of 1068 which occurred between September, 1930, and September, 1931. This loss raises some doubts concerning the feeling of a year ago that the elementary school population will soon be stable at a figure only slightly below the present population. The marked decreases in elementary school membership in recent years are in the main attributable to the transfer of upper grade children to the junior high grades in the high schools, a lower birthrate, and the continuance of restricted immigration which was first instituted over a decade ago.

The chart on this page suggests the major problem in school administration in the last few years. On the chart the broken line indicates the population trend in the years since 1920, while the heavy lower line traces the growth in secondary school population in these same years. The more rapid growth in secondary school population than in city population is apparent. The high school population, in fact, grew thirteen times as fast as the city population in the ten-year period 1920-1930.

DAY SCHOOL PUPILS BELONGING—SEPTEMBER 1920-1935

SEPTEMBER	ELEMENTARY SCHOOLS		JUNIOR AND SENIOR HIGH SCHOOLS		OTHER SCHOOLS		TOTALS
	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	
1920	30069	80.79	6530	17.04	831	2.17	38330
1921	33068	77.77	7235	17.00	2224	5.23	42547
1922	33094	72.37	8970	19.62	3663	8.01	45727
1923	32936	68.60	10176	21.20	4898	10.20	48010
1924	34132	68.80	10958	22.09	4519	9.11	49609
1925	34296	68.23	11244	22.37	4725	9.40	50265
1926	34000	66.92	11706	22.44	5540	10.64	51155
1927	35486	66.81	12366	23.28	5261	9.91	53113
1928	35133	66.18	13405	25.25	4551	8.57	53089
1929	34343	64.80	14342	27.06	4313	8.14	52998
1930	33202	62.09	16523	30.90	3751	7.01	53476
1931	32134	60.57	18249	34.40	2674	5.03	53057
1932	31205	58.48	20106	37.69	2046	3.83	53357
1933	30332	58.30	20000	38.57	1517	2.93	51849
1934	29796	57.90	20232	39.31	1434	2.79	51462
1935	28714	57.04	20544	40.81	1081	2.15	50339

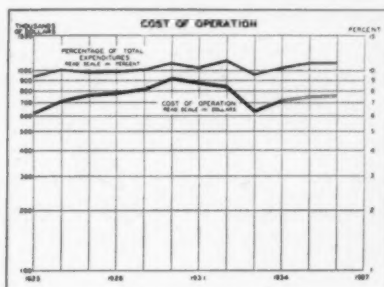
◀ 19 ▶

Operation

The Regular Household Expenses of the School

Costs which fall under the fourth general subdivision of current expenditure are in the aggregate known as the cost of Operation. They are without question the most easily understood as they correspond almost exactly with similar expenditures in the household. If instruction is to be carried on most effectively,

The sixty buildings now utilized by the Board of Education for school and other purposes, because of their size and because of the number of persons using them, demand a large corps of janitors, charwomen, and other assistants. This corps gives the classrooms and corridors a regular daily sweeping, a more



classrooms must be well heated and lighted, and they must be clean and orderly. It is necessary also to supply the schools with water, gas, electricity, and telephones. In recent years homes have found it advantageous where possible to install radios, electric refrigerators, motion picture projectors, and other equipment connected with public services. Similar action by the schools has, of course, added to the cost and complexity of Operation.



intensive cleaning at longer intervals, and a thorough renovation during the long summer vacation. At this time, for example, all linoleum floors are waxed, furniture is polished or refinished, and walls are washed. In summer lawns have to be mowed, and an ever-increasing amount of shrubbery trimmed, while in winter there are miles of walks to be shoveled, fires to be maintained, and ashes to be removed.

1932 ANALYSIS OF THE COST OF OPERATION 1936

	1932	1933	1934	†1935	*1936
OPERATION	842,128.58	634,541.13	713,665.82	745,000.00	760,000.00
1. Janitor and Other Employees	483,824.57	389,147.10	402,869.39	413,000.00	425,000.00
2. Janitors' Supplies	16,058.16	3,059.29	24,682.89	20,000.00	25,000.00
3. Fuel	165,746.12	99,529.78	124,217.43	150,000.00	140,000.00
4. Water	36,087.31	1,750.58	1,944.10	2,000.00	2,000.00
5. Light and Power	72,805.15	69,382.01	71,764.26	75,000.00	80,000.00
6. Telephones	24,351.76	26,494.69	29,750.00	28,000.00	29,000.00
7. Protection Services	11,108.86	14,627.38	28,153.77	28,500.00	30,000.00
8. Care of Grounds	2,288.64	2,205.58	2,340.63	2,000.00	2,500.00
9. Storage and Trucking	25,349.00	23,150.20	24,602.54	23,000.00	24,000.00
10. Public Use of Buildings	3,512.55	2,656.70	2,527.73	2,500.00	3,500.00
11. Laundry, Cleaning, etc.	996.46	357.82	753.08	1,000.00	1,000.00

†Partially estimated.

*Budget.

◀ 19 ▶

vamping of the entire organization. It is built on the budgets of preceding years by careful plus and minus operations based on trends and plans and changing conditions. It assumes that the process of education as carried on by a school system is continuous, and that the costs shown in the budget of the coming year are in the main those of the present year with such modifications as may be anticipated.

The budget assumes further that accurate cost figures, pay roll analyses and moving averages extending over periods of years for both functions and objects of expenditure are more reliable as a basis for forecasting than is a summation of individual estimates, especially when the

budget period covers parts of two school years. The one figure in building the Rochester budget that is held most important is monthly cost. This is worked into a twelve months' moving average which if projected indicates with surprising accuracy the effect of changing conditions, whether in the salary roll or in the consumption of fuel.

However sound or unsound its fiscal methods or controls may be in other respects, the Rochester board of education in its planning is always handicapped by a fiscal year that corresponds to the calendar instead of to the school year, producing all the baffling inconclusiveness of that sanquinary round of pursuit, "Three Blind Mice."

Where Fifth Graders Play Contract

By RALPH B. ANDERSON

With seemingly sophisticated precocity, some of the pupils in the University Elementary School, Columbia, Mo., have taken up contract bridge. The pupils have literally dismissed the childhood games of hop scotch, going to Jerusalem and farmer in the dell in preference to the brain-child pastime of Ely Culbertson.

Contract bridge, along with other card games, was introduced to the pupils last winter when severe cold weather made it impossible to utilize the playgrounds.

Frank H. Gorman, principal of the school and an instructor in education at the University of Missouri, stresses the fact that the games were not introduced to the 125 pupils to add to their social grace.

"It is necessary that the pupils learn how to be good losers and good winners. I have seen many adults crow when they win and sulk when they lose. The games that the children are playing develop good sportsmanship besides giving the child knowledge of a game by which he can amuse himself the rest of his life."

The idea of teaching fifth and sixth grade pupils to play contract bridge was conceived by themselves. Some of the pupils had played the game at home while others had gained an interest in the game by watching their parents.

Decks of cards and other games are issued to the pupils in much the way they secure a book from their library. An individual, having got-together a sufficient number to play a certain game, goes to the librarian and checks out the game he wants. Other games around which the pupil recess periods center are checkers, parchesi, old maid, authors, touring, sorry, somerset, backgammon, rummy, dominoes, snap, I doubt it, hearts and lotto.

Children learn about flowers and vegetables by growing them in Hawaii where 18,000 school pupils take part in the annual school garden contest. Competitions in gardening have been held on the islands for many years.



UNIQUE in the school systems of the United States are the garden contests held each year in the Territory of Hawaii by the department of public instruction. More than 18,000 pupils participate in the contests, either by working in gardens that are a part of the campus or in their gardens at home. From 40 to as high as 700 pupils in each of the 115 participating schools are enrolled. More than 2,000,000 square feet of land is used for school gardens. The total number of competitors during the last eighteen years is well in excess of 100,000. Judges total into the hundreds.

In 1907, when the late Wallace R. Farrington, later governor of Hawaii, was editor and manager of the *Evening Bulletin*, he recognized that future opportunities for the youth of the islands lay in the soil. How to foster interest in the opportunities agriculture offered and how to promote the dignity of agricultural work were his problems. He solved them by organizing the first garden contest. The idea took root slowly the first year, but soon its great value was realized not only by the teaching profession but by the rank and file of citizenry.

Cash awards play a minor rôle in the contest. Participants usually make far more money from the sale of their vegetables than they receive in prizes. The object of those sponsoring the competition is to provide a large number of small prizes rather than a few major awards. It is al-

ways emphasized that every child who enters the contest and carries through his or her garden has won something in dollars and cents value, but far more in knowledge, health and habits.

Imagine the job of judging 115 school gardens plus nearly 700 home gardens on the island of Hawaii, about 250 on the island of Kauai, a similar number on the island of Maui, another 75 on the island of Molokai and in excess of 600 on the island of Oahu. Some of them, especially in the country districts, are hidden far away from the main paved highways. Others are a considerable distance from any automobile road. To get to them judges must clamber up steep paths, through groves of guava bushes and lantana, but every garden is visited at least once and most of them several times during the growing season.

A People's Future

Vegetables for Sale in Hawaii





These children of Manoa School, Honolulu, raise vegetables both for home use and for use in the school cafeteria. Below, pupils of Lincoln School, Honolulu, who took a prize in the flower section of the annual contests.

in a Child's Garden

By CLIFFORD CRESSLER



It is obvious that the department of public instruction could not furnish enough judges to visit all the islands and all the gardens. Three hundred judges, including representative men and women from leading industrial and civic organizations, volunteer their services. Despite rain, sun, mud and dust these men and women spend days and weeks on end visiting gardens, talking with the youngsters, giving them advice. The child, on the other hand, realizes he is doing a pretty fine job when a prominent attorney, the manager of a great plantation or an industrialist drops his own important work to come and visit the vegetable plot.

In practically every school a prominent place is given to certificates of award won by the school as a whole or by individual pupils, while homes in the rural sections, whether they are large or small, have hanging a

certificate showing that some member of the family has participated in the contest. In a number of cases the certificates of father and son hang side by side. Men who enrolled in the contest at its start are today heads of families and are encouraging their children to participate. No award given in the territory is more appreciated than these certificates.

The rules of the contest are extremely broad. Nowhere in the rule book is there any reference to the number of children who shall work in a school garden, the size of the plot, or the type of vegetables that shall be planted. Such things are left for the individual school to determine in accordance with its specific teaching program. Changes in the rules are made from time to time to meet shifting conditions but are always made with the consent and cooperation of the department of public instruction and are designed to increase the educational value of the project.

"If properly planned and carried through, both the school and home gardens are purposeful activities and out of them the progressive teacher will develop much valuable classroom instruction in project planning, oral English, written English, record and cost keeping, nutrition and health work," says Oren E. Long, superintendent of public instruction.

"The writing of garden reports and especially articles and letters for the farm and garden pages of the newspaper provides a valuable opportunity for written English."



Recess time is garden time in this school, one of 115 entered in the territorial contest.

When a pupil at Hanamaula School on the island of Kauai planted beets, for instance, he made a study of the vegetable. He learned in what parts of the world beets grow, why they grew there, when they were first grown, how they were prepared for food, what food value they have and what marketing possibilities exist in his community. All of this he learned, in addition to such purely agricultural facts as how deep beets should be planted, what kind of fertilizer they need and how many a given plot should reasonably yield. The final part of the work was the writing of a full report for the school records and the sending of another report to the *Star Bulletin* for publication.

Years ago Ernest deSilva was a participant in these contests. Today he is principal of Honomu School, prizewinning institution on the island

of Hawaii. He is still carrying on the program he learned as a pupil.

"This contest is the most popular we have," says Mr. deSilva. "It has motivated letter writing for the boys of the third to the eighth grades. Their teachers have noticed a marked improvement in legibility, neatness, form and language.

"The home garden contest also has been a worth while activity, if for no other reason than that it has led to home gardening as a hobby. We have found that the home garden offers teachers a splendid approach to the home and family."

Using as their slogan "Earning While Learning," lads who have left the grammar and intermediate schools, spend part of their time in the classroom and part of their time in actual work. Of these 292 are working on 424.97 acres of sugar cane; 57 are on pineapple plantations; 433 raise

poultry, having a total of over 25,000 birds; 375 have vegetable gardens extending over a total of 1,486,500 square feet; 21 are establishing dairy herds; 5 are raising beef cattle, and 89 are working on coffee plantations. Other projects include raising rabbits, bees, tropical fruits and commercial flowers.

These youngsters will some day help to produce food for Hawaii's steadily growing population. Many hundreds of thousands of dollars now go out of the territory to other sections of the United States for the purchase of fruits, vegetables, poultry and dairy products that may be raised in Hawaii by the children who are now receiving their introduction to agriculture through these garden contests.

Details of the contest are handled by a young woman who knew little of gardening when she assumed her

position ten years ago. Today, Gwen-fread Allen is recognized throughout the islands as an expert gardener and is known to thousands of persons through personal contacts made in garden trips and in the special gardening pages she has made into one of Hawaii's outstanding newspaper features.

This year the program is being broadened in scope with a "Model Family Garden" project as an integral part of the school competition. This is an effort to develop, on a limited area, a vegetable garden suitable for the use of an average family. Carrying out this part of the general school competition will not hamper other garden work. It is hoped that valuable data will be secured on appropriate crops and plantings for a family garden and that more home gardens will be encouraged through this project.

Contestants are urged not to allow vegetables to remain in the ground until they are too mature, awaiting the judges. Records should show the variety and quantity of vegetables harvested before the judges arrive. The home garden is meant to give the family a continuous supply of vegetables; hence it should be harvested at varying intervals. A home garden full of mature vegetables may be attractive in appearance but it is not an ideal home garden. The home garden completely ready for harvest is not scored so high on judgment and results as the garden which obviously has been supplying vegetables for the family over a period of weeks and gives promise of continuing to do so.

The scoring of the gardens is simple and is based on seven factors: (1) general appearance, 10 points; (2) condition of crops, 10 points; (3) perseverance, 20 points; (4) judgment, 25 points; (5) records, 15 points; (6) results, 10 points, and (7) letters to newspaper.

A clause in the rules states that "any assistance received by a contestant must be recorded in the record books, even though it may not be paid for."

The Teacher of Social Science and Virginia's New Curriculum

By G. B. WYNNE

FOR many years history, civics, economics and sociology have been considered as isolated subjects in the secondary schools of the country. Teachers have, in slave-like manner, followed the time sequence of many events of little importance in this changing world.

In the new Virginia course of study centers of interest and their aspects have been selected and placed before the teacher. A list of aims and methods of instruction in the first part of the course of study may be used as guides for better teaching. Under the centers of interests are a number of elements which are or should be a part of the child's environment. From these interests or elements, the teacher can with little difficulty find a starting point for her unit or problem.

Study Made of World Peace

Some time ago a group of boys and girls whom I teach in a social studies class selected a number of interests, among which were many of those elements listed under "Center of Interest for Fourth Year Pupils" in the Tentative Course of Study. Elements selected were as follows: League of Nations, peace conferences, Japanese imperialism, Fascism, Nazism and Bolshevism. After they read books, magazines and newspapers and interviewed various persons for two days, the members of the class decided that their unit would be named as follows: "How can the nations of the world preserve peace?"

Four groups consisting of six pupils each worked on different activities, some of which were selected from the course of study. Each group made a contribution, through the activities used, toward answering the question. During the six weeks involved, different groups conducted chapel programs on the topic.

At the end of five weeks a test was given and after a check was made of the results, it was decided by both teachers and pupils that more could be accomplished. This decision resulted in a list of problems made out by the pupils with suggestions from the teacher. Some of these questions and problems were as follows:

1. Make a list of reforms that would be an asset to the League of Nations.
2. Make a report on the relationship existing between the League and the Treaty of Versailles.
3. How may disarmament be brought about by the various nations?
4. Are dictators assets or liabilities to world peace?
5. How will the recent attitude of the United States toward Russia affect international relations?
6. How may the Japanese people become comfortable and happy without recourse to war?
7. How may the high school boy and girl play a part in the movement for better relations between nations?

Community Combed for Material

These problems were mimeographed for each pupil and suggestions were made by the teacher as to how each group could work on activities that would be of aid in the completion of the work. At the end of that week another test was given. The results of the latter test indicated that the pupils of the class had met the required standards.

In addition to the use of their library, which is located in the social studies' classroom, the pupils of this class secured more than 200 magazines, newspapers and books from the homes of the community in an effort to make their work a success.

Safety Education in Rural Schools

By ALBERT EARLEY

RURAL schools in Delaware take safety education seriously. We have not added safety as a separate subject to our curriculum, but are attempting to integrate it with the other subjects. One teacher used a safety project that integrated all the subjects of the curriculum.

In one-teacher schools the instructors find it possible to integrate safety and penmanship or safety and music or safety and oral and written English. The teachers and pupils are enthusiastic. Children in some schools, of their own volition, write short safety plays and act them in the opening exercises.

Fourteen Schools Unite for Play

Last year the rural schools in Western Sussex County were asked by the Delaware Safety Council to write and present an original play on the occasion of the annual rally

for automobile drivers. Fourteen rural schools took part. Pupils were scattered over one half the county. In spite of this handicap they produced a creditable play before 1,200 persons in a theater in Milford, Del. They had only one combined rehearsal before they arrived at the theater.

Pupils Make Model Farmsteads

A year ago the Delaware Safety Council asked me to select some rural school to build a farmstead depicting farm hazards. We finally selected three schools for this work. They had no manual training department, no tools and no lumber. In the face of these handicaps the schools made model farmsteads which won the unstinted praise of the state superintendent of police and the president of the state safety council.

These model farmsteads were portrayals of hazards incident to farm

life. One was placed in the Kent-Sussex Fair and was seen by approximately 50,000 persons. While the Gumboro rural school was working on its farmstead, I found the children drawing plans, discussing proportions and making measurements. The project made arithmetic alive to the children. This project developed valuable citizenship traits in the children of the Blades and Greenwood schools. The Blades School is small and antiquated. The pupils were forced to work in a small, dark cellar. They had to be resourceful and learn to work under discouraging conditions.

The most interesting and profitable form of safety work is the writing and broadcasting of original plays. The photograph represents the broadcasting team of the third and fourth grades of the Sycamore two-teacher rural school.

Plays Drafted in Class

Last year there were five rural schools, three of them one-teacher schools, which wrote and broadcast safety plays. This year the supervisor asked the Sycamore lower grade room if it would like to broadcast. The children gladly accepted the opportunity. In the next English class the teacher started by asking the question, "Have you heard the slogan, 'Safe at Home'?" The pupils talked freely about their personal experiences and observations. As the children talked the teacher wrote on the blackboard. Few changes were found necessary to make the finished play.

The Sycamore children are typical farm children. Their teacher, Mrs. Elizabeth O. King, has had no formal training beyond the high school except summer school work. Enthusiasm and interest were the factors responsible for an experience that the children will never forget.



Third and fourth grade pupils make up this broadcasting team at Sycamore, Del., where the rural school does safety teaching.

When the Flesh Is Weak

By M. M. CHAMBERS

IT IS generally thought, and probably rightly so, that the level of integrity among the half a million school board members in the United States is relatively high. Among so large a group of public officers it is inevitable that many instances will occur wherein the performance of their duties does not measure up to the standard of perfection, but generally such shortcomings must be ascribed to honest errors of judgment and not to corrupt intent. Nevertheless, occasional cases of downright venality come to light and must be dealt with by the courts in accordance with the law of the jurisdiction in which they arise.

One might prefer to let the records of such cases lie unread in the judicial archives, but this would be to shut one's eyes to a realistic picture of the current American educational scene. The tactics of the frightened ostrich ill befit the good citizen. It is not unwholesome to admit that board members are not always models of civic virtue. To err is human.

The "Kick-Back Racket"

Let us look at some revolting snapshots of attempted private aggrandizement at the expense of the welfare of the schools, and as we reflect upon the pettiness of the details, let us do some conscience-searching and address ourselves anew to the problem of how the integrity of the lay control of public education can be maintained and improved.

An astounding example of a school trustee's using his position for petty private gain at the expense of the public service comes from an Indiana township, where the evidence showed that the trustee refused to consider any applicants for teaching positions unless and until they entered into an unlawful contract with his wife to pay her 10 per cent of their prospective

yearly salaries for the use of her influence in obtaining the appointments.

The offending trustee was prosecuted and removed from office under an Indiana statute which provides that the circuit court must try any officer formally accused of refusing to perform his official duties, and if the charge is sustained, remove him from office and enter judgment against him for \$500 in favor of the prosecuting officer. The supreme court affirmed the judgment.¹

It has been reported that in Iowa and other states rural boards of education have circumvented minimum salary laws by requiring prospective teachers to agree to purchase fuel for the school with their own private funds, or even to pay a stipulated sum as a rebate to the school district. This type of "kick-back," though reprehensible enough, pales in comparison with the Indiana case in which the illegally extorted contribution went into the pocket of the trustee himself, via the agency of his wife.

Real Estate Manipulation

It is sometimes difficult for board members who are local real estate owners to observe the line between their private interests and the public welfare in the matter of the acquisition of school sites.

A city in the state of Michigan offers an interesting case. The president of the board of education acquired at a cost of \$17,000 a vacant lot adjoining a large school building at about the same time a bond issue to erect a new junior high school building was authorized. Almost immediately

he executed a contract of resale to a private purchaser at \$30,000, but shortly the buyer notified him that he would be unable to complete the purchase, and asked for the return of a \$5,000 note already given as an installment payment. Thereafter the board president participated in meetings of the board of education where it was determined to locate the new building on the lot in question, if possible, and to acquire the lot for that purpose at a price of \$32,500.

Secret Negotiations

In the course of these proceedings the president falsely told the board that the present owner would sell the lot for no less than \$32,500, this sum being what he had contracted to pay for it (\$30,000) plus \$2,500 to cover the cost of plans he had already made for the erection of an apartment building. The president urged the board to conduct the negotiations without disclosing its identity, lest the owner raise his price; and accordingly the transaction was completed through the escrow agency of a trust company.

The evidence showed that \$30,000 of the purchase price properly went to the holder of the lot and was by him turned over to the president in discharge of his contract of purchase, but that he (the current holder) knew nothing of the additional \$2,500, and that the president obtained it and deposited it in his own private bank account.

On this state of facts the president was prosecuted and convicted in a criminal action for procuring money through false and fraudulent representations.² Subsequently the school

¹Weatherholt v. State (Ind.), 199 N. E. 713 (1936).

²People v. Sachse, 252 Mich. 275, 233 N. W. 227 (1930).

district sued him in a civil action to recover the \$2,500 and also the \$13,000 "profit" representing the difference between what he had originally paid for the lot (\$17,000) and the price (\$30,000) he had obtained for it by the triangular transaction above described.

In the lower court the district obtained a judgment for both sums, but on appeal it was held that the evidence would support no more than a judgment for \$2,500, because there was no proof that the president's sale of the lot to a private purchaser for \$30,000 was collusive or for the purpose of fraud, nor that this contract had actually been cancelled when the sale was made to the board of education.³

Regardless of the measure of recovery, the criminal and civil suits growing out of this case leave no doubt but that real estate deals between a board member and the district he serves are fraught with temptation and might well be banned as contrary to public policy. Indeed, shall we not ask ourselves why such transactions, already prohibited by statute in some states, are not everywhere forbidden?

Nepotism in Administration

The appointment of close relatives of board members to remunerative positions in the school system is closely related in principle to outright private pecuniary aggrandizement at the expense of the public and is scarcely less reprehensible. Many states have one or more statutes designed to prohibit or minimize nepotism, but a comprehensive study of these laws and their administration would reveal many loopholes and widespread laxity of enforcement, in some places amounting to no less than brazen nullification.

The courts are generally inclined to give no comfort to violators of nepotism laws and usually interpret the statutes as liberally as possible in favor of the public policy of preventing school positions from being mo-

nopolized by relatives of school board members. For example, the Missouri constitution provides that any public officer having the right to appoint any employee of the state or any local subdivision, and who appoints "any relative within the fourth degree, either by consanguinity or affinity" shall thereby forfeit his office. This may seem harsh enough, but undoubtedly there could be honest doubt of its application to a member of a board of school directors, who has no authority to make any appointment in his individual capacity, but only a right to participate in the board meetings at which such appointments are made. The supreme court has resolved this doubt in favor of the state by ordering the removal of a school director who voted for the employment of a teacher who was his first cousin by affinity, in a hard-fought recent case.⁴

In somewhat similar vein, the Arkansas supreme court has held that a statute permitting a relative of a school director to be employed as a teacher only upon petition signed by two-thirds of the patrons of the district, means exactly what it says, and is not satisfied by a petition signed merely by two-thirds of the citizens residing in the district, some of whom may not be school patrons.⁵

Strengthens Evidence of Liability

Another angle of the judicial attitude toward nepotism is illustrated by a North Carolina case wherein the members of a school committee were sued individually for damages on account of the death of a school girl killed in a school bus accident. It was shown that the bus driver was a close relative of one of the committeemen and that he had been hired against the wishes of the school patrons, who had protested that he was reckless and incompetent.

The lower court entered an order of nonsuit and dismissed the case without letting it go to the jury, which is equivalent to holding that

there is not enough evidence of liability to justify a trial. On appeal, this judgment was reversed and the case remanded for trial by jury. The supreme court thought that the practice of nepotism in selecting the bus driver was sufficient to raise a question for the jury as to whether the committeemen had been actuated by malice or corruption, so as to be personally liable.⁶

A speeding up of the nationwide trend toward closing the loopholes in the laws relating to nepotism and other breaches of integrity in office would be an excellent service to public education. Laws alone cannot create reforms, but as public morality rises to higher levels, we should take care to keep the laws a little ahead of current practice. An important purpose of statutes is to proclaim the best practicable public policies more clearly than would be the case if the legislature did not act.

⁶*Betts v. Jones et al.*, 208 N. C. 410, 181 S. E. 334 (1935).

Newspaper Publicity Creates Good Will

Salient facts about the work which their schools are doing is brought to the attention of citizens of Little Rock, Ark., each Sunday in a small boxed insert that appears on the school page of one of that city's local papers. The insert is headed "Do You Know." Under this appear outstanding facts such as:

"That there is a grand total of 15,849 pupils enrolled in the Little Rock Public Schools, and that it requires a teaching force of 430 to teach these pupils?"

"That the public schools of Little Rock, with their payroll of 663 people—teachers, administrative officials, janitors, and others—represent the largest business in Little Rock?"

Sometimes the information given centers around the health program. Another time facts about the dental clinic will be given. In each instance such information is furnished by Charles F. Allen, supervisor of secondary education.

⁴*State ex rel. McKittrick v. Whittle*, 333 Mo. 705, 63 S. W. (2d) 100, 88 A. L. R. 1099 (1933).

⁵*School District No. 39, Franklin County v. Gattis*, (Ark.), 79 S. W. (2d) 73 (1935).

³*School District of City of Pontiac v. Sachse*, (Mich.), 264 N. W. 396 (1936).

Today's Junior High

Curricular Trends in Twenty-Five Schools

By CALVIN O. DAVIS

OF ALL the problems confronting the junior high school today none is more troublesome than that relating to the program of studies and the curriculum. "What to teach" and "How to organize and present instructional materials" are perennial questions.

In its beginnings the junior high school was but an extension of the traditional four-year secondary school, the older unit being expanded to include grades seven and eight. Consequently at that time the program of studies of the modified school consisted largely of the college preparatory courses pushed down a year or so in order to give a longer continuity to their pursuit. Naturally this change was not found altogether satisfactory. Subjects like Latin, algebra and ancient history, which had been found difficult for many pupils in the ninth grade, assumed more awesome appearances when offered in the seventh or eighth grades.

Again a change in theory developed. Instead of the junior high school being regarded as the lower half of a college preparatory school, the conception grew that it had rights of its own, that it was a more or less self-contained division of the educational system and possessed unique aims and purposes.

Old Quarrel Continues

In particular the idea came to prevail that the new unit should serve as an intermediate school having for its primary function the connecting of elementary education (characterized by common elements for all) with secondary education (characterized by a somewhat differentiated and specialized program of work) and doing this in a gradual evolutionary way. Conceived thus, the junior high school became largely a transitional

and an exploratory school, with emphasis upon a wide range of studies organized in the form of general introductory or try-out courses.

All this means, therefore, that the old quarrel as to whether the four-year high school was to be essentially preparatory to college or preparatory to life was shifted to new grounds. And that quarrel is still going on.

Three Answers Sought

In order to determine what the situation in this matter is today I recently addressed an inquiry to twenty-five representative junior high schools in the North Central territory. Three questions only were asked, namely:

1. Is the junior high school in your city maintaining its proper hold on (a) the public generally, and (b) the junior high school pupils themselves?
2. What notable changes have recently been made in your school's program of studies and curriculums?
3. What to you is the most troublesome problem of the junior high school in respect to (a) the program of studies, and (b) the general organization and administration?

Replies were received from all twenty-five schools addressed. To question No. 1 not a single negative vote was received. Both in respect to the public and in respect to the pupils themselves the junior high school is as firmly established as any other part of the school system.

As to the recent curriculum changes made in these schools, the following verbatim statements can best give the situation. They are:

Bay City, Mich.: "We are intro-

ducing unit studies through lesson sheets that take care of individual differences without formal homogeneous grouping."

Birmingham, Mich.: "We are lengthening class periods, introducing a daily thirty-minute home room activity period, and giving definite attention to guidance."

Cedar Falls, Iowa: "We are reducing the number of offerings."

Colorado Springs, Colo.: "One could hardly say that any notable changes have been recently made in our offerings. We are always modifying (we hope) or improving our educational procedures, but we do these things gradually, some this year, others next year, and so on."

Cleveland: "We give increasing stress to the social studies and current events."

Dayton, Ohio: "We have a unitary 7-8-9 grade program, completely segregated from the senior high school."

Denver: "Our program is constantly being revised."

Detroit: "No radical changes, but a constant effort to adapt subject matter and methods to all types of ability."

Duluth, Minn.: "No notable changes but a continuous attempt to make the program of studies serve as a foundation for the education of many boys and girls who do not continue through high school and go on to college."

Davenport, Iowa: "We have dropped bookkeeping and substituted junior business training."

East St. Louis, Ill.: "Nothing."

Emporia, Kan.: "Added general mathematics and ceased to require

algebra. Made spelling and penmanship part-time subjects instead of full-time subjects. Are giving (free) group lessons on band and orchestra instruments."

Faribault, Minn.: "None."

Flint, Mich.: "Changes, effective September, 1930, include: (a) general language dropped as a separate course in 8B, and fine arts substituted but dropped in September, 1932; (b) general mathematics offered in the ninth grade to pupils who do not wish to take algebra or who would not benefit by a year's work in algebra; (c) junior high school commercial work, elective in 8A, 9B, 9A, restricted to two semesters for each pupil. Typing in junior high school commercial courses restricted to ten weeks. (Since this time Junior Business Training I and II elective in the ninth grade [with no typing] and a required 2½ period per week course in General Business Information in the 8A grade have been placed in the junior high school); (d) guidance a required five-hour course in 8B of Whittier, Longfellow and Lowell junior high schools (since eliminated); (e) directed study in 8A, 9B, 9A at Whittier, Longfellow and Lowell. (Subsequently eliminated February, 1931); (f) a unit of commercial art placed in art course.

"Changes effective September, 1931, include: (g) general business information placed in 8A and practical arts of 8A reduced to 2½ hours per week; (h) seventh and eighth grade required art, music and auditorium classes eliminated; (i) ninth grade general science or biology reduced from five hours to two-and-one-half hours per week; (j) ninth grade guidance course of two-and-one-half periods per week eliminated; (k) instrumental music classes open to seventh and eighth grade pupils by special permission of the principal; (l) major features of ninth grade guidance course incorporated into 8A, 9B and 9A home room programs; (m) vocal music incorporated in home room program, especially in the seventh grade; (n) teachers to

teach one group of pupils more than one period per day, and (o) school day reduced from six to five periods."

Fort Smith, Ark.: "We are trying out a plan of assigning one of our teachers three classes only per day, each class meeting for a continuous double period. This teacher teaches each of the three groups or classes eighth grade history and English."

Hamtramck, Mich.: "We allow each child to progress at his own rate."

Kalamazoo, Mich.: "General language was added this fall and a thorough analysis of our entire program of studies is now going forward."

Lansing, Mich.: "The following are our most notable recent curriculum changes: (a) a tendency to have all courses meet five times per week; (b) a gradual increase in enrollment in both instrumental and vocal music; (c) an emphasis on character education with a definite course outlined for the pupils; (d) Latin has been discontinued below the ninth grade; (e) general language has been moved from 7A to 8A grade, so that it may come just before taking up a foreign language; (f) general science has been shifted from 8B to 7A grade."

Milwaukee: "Nothing radical."

Niles, Mich.: "Decrease of electives during the depression, but have started to restore them."

Rockford, Ill.: "Exploratory courses have 'come down to earth'; they no longer stress exploration for exploration's sake. Particularly in the industrial arts program has the emphasis changed from tool processes and skills to vocational outlooks and consumer information."

Saginaw, Mich.: "Have completely reorganized the program of studies with emphasis now on the vocational and social."

St. Joseph, Mich.: "Have changed the manual training course to a general shop course."

South Bend, Ind.: "We now offer science two days a week throughout the seventh and eighth grades. Have combined several subjects into what is called social studies. Require

every one to participate in some club activity — and on school time."

Superior, Wis.: "We are increasing the range of exploration in all subjects and are doing so by making the approach to all work decidedly different from what it is in the elementary school."

Most Troublesome Problem

Finally, in response to the query, "What to you is the most troublesome problem of the junior high school in respect to the program of studies?" the same twenty-five schools replied as follows:

Bay City: "We have no particular problem of this sort."

Birmingham: "Our greatest problem is inelasticity due to lack of funds and the influence of college entrance requirements."

Cleveland: "College requirements still reach into the ninth grade."

Colorado Springs: "Our problem is finding suitable material in book form for our lower quartile of pupils and securing such a proper emphasis on essentials in subject matter as will leave time for many other important interests not now regularly met in the curriculum."

Cedar Falls: "Vocational work is handicapped."

Dayton: "It is difficult to get a sufficient number of trained teachers of guidance and sufficient time for a guidance program."

Davenport: "It is difficult to find time enough to carry out the comprehensive program the junior high school should have."

Denver: "How to offer the work we want to offer in the content subjects (English, science, social studies and mathematics) and at the same time to develop proper skills in arithmetic, spelling, penmanship, etc."

Detroit: "Our greatest problem is working out a satisfactory program in social science and, in general, to vary our curriculum offerings so as to meet the needs of different pupils."

Duluth: "The courses in history, social studies and mathematics constitute our greatest problem."

Emporia: "How to provide more

try-out courses in grades seven and eight and how to organize the social studies so that they will meet pupils' present and future needs."

East St. Louis: "No particular problems here."

Faribault: "No problems here."

Flint: "The main difficulty has been too much senior high school work and not enough elementary school work in the junior high school."

Fort Smith: "There is available little good instructional material suitable for the junior high school and often we are not able to get that little."

Hamtramck: "The work is not vital enough."

Kalamazoo: "Our problems are how to find time to do all that we should like to do; how to break away from tradition, and how to provide worth while extracurricular activities."

Lansing: "How to get studies and curriculums that will appeal to pupils of low grade mentality. We still have children who are not sufficiently interested or else have not sufficient mentality to do junior high school work."

Milwaukee: "Our chief problem centers about the question of beginning languages in the seventh grade."

Niles: "Our problem is created by having too many subjects daily and too long a school day."

Rockford: "The problem of foreign language — which to offer. Also the problem of English — shall we stress functional English or comply with the formal grammar requirements demanded by senior high school and college?"

Saginaw: "Varying the curriculum so as to meet the needs of varying groups of pupils."

St. Joseph: "How to keep the curriculum open and elastic."

South Bend: "How to reduce pupils' loads; they are too heavy."

Superior: "Our chief problem arises out of having too many small junior high schools in the system."

What summarizations can be made from these replies? Possibly these:

1. The schools are finding it difficult to serve two masters — the real interests and needs of junior high school pupils and the demands of the senior high schools and colleges.

2. It is difficult to find time for all the courses and activities that a true exploratory school should provide.

3. It is difficult to know what is the best way to organize courses, particularly the social studies, so as to make them truly vital to the pupils, especially those of low mentality.

4. Some schools are adding new subjects to the program; others are subtracting from their curriculum.

5. Programs and curriculums are being modified but generally in inconspicuous ways and in piece-meal fashion.

6. Reshiftings of courses from one grade to another are taking place quite frequently, all in the hope of finding the best place allotment for them.

7. Combinations of subjects formerly offered separately are common.

8. The idea of functionality in the school appears to be gaining favor.

9. The social studies are receiving much attention.

10. More definite attention to guidance is being given generally.

Why Not Ask Them?

By WILLIAM McANDREW

WHENEVER you are away from home and stopping at a hotel, you are likely to find in your room a card or slip asking your opinion of the hotel's service, even suggesting points for appraisal and leaving a space for your opinion. Railroads and restaurants commonly issue printed requests that patrons make suggestions for improvement of the service.

Often have I wondered why we school people have not made use of this device. I imagine that I never used it when I was in charge of schools because I felt that I knew so much more than all the other citizens in town that it would be a waste of time to examine their opinions. Come to think of it, I really was not so bad as that. I do remember that both in Brooklyn and in Chicago, I had a canvass made by volunteer teachers and by myself of employers, asking for needed points of improvement in what we were teaching.

In THE NATION'S SCHOOLS, some time ago, I brought up again this good business practice of satisfying the customer. Homer Scarborough, superintendent of the schools in Great

Bend, Kan., tells me that this magazine's suggestion of sending home by each child a note, inviting a letter to the superintendent that should tell good or bad things about the schools, stuck in his mind for months. Finally he tried it. He says:

"I have never really known any school system where it was attempted, have you? At any rate, some teachers thought it was equivalent to putting one's hands in one's pocket, and inviting a smack on the nose.

"We have approximately 1,550 children in daily attendance in our schools, representing probably 800 or 900 families. From this number I received about 150 letters. While the number was perhaps disappointing, the quality of the letters was not. The first letter returned had this to say: 'Fire all the teachers and get new ones, and your schools might amount to something.'

"Almost without exception, however, letters were written in a fine spirit and were commendatory in the main. The type of suggestions made indicated some appreciation of the aims of the school, and all were stimulating. Thanks for the idea."

A School Surveys Its Own Guidance System

By WILLIAM G. BATE

WHAT are the problems incident to transfer from one school to another that bother pupils? What guidance aids are recognized by pupils, by advisers? How many pupils are making the right curricular choices? How many have vocational and educational plans, based on good reasons, and in harmony with their capacities? Do advisers know the facts needed to give effective guidance to their advisees? What are the strong points in the guidance system? Where does the system need improvement?

During the year 1932-1933 the secondary school administrative group in Richmond, Ind., decided to study the general problem of guidance in our own system.

The information gathered was centered around the following groups: (a) pupils in the twelfth grade who completed junior high school in spring of 1930; (b) pupils in the tenth grade who completed junior high school in spring of 1932; (c) pupils of grade 7A, and (d) advisers and home room teachers of all grades.

A questionnaire was used with the pupil groups in an effort to secure the pupil's own report as to curricular difficulties and adjustments, difficulties and adjustment in other phases of school life, help received from different guidance agents in adjusting difficulties, curriculum and reasons for choosing it, helps in making curricular choice and vocational plans.

A questionnaire was submitted to the advisers of both the 10A and 12A groups asking for information on twelve items concerning each pupil. A questionnaire form asking for information on each pupil was submitted to the counselors who had advised these groups. All master record

cards for the 10A and 12A groups were checked. Individual conferences, in regard to guidance activities and methods, were held with all advisers of the 10A groups.

The tabulated data were studied for

evidence in answer to some eighteen questions. The questions and answers formed the basis for determining points meriting careful consideration and calling for improvement in practices including the following:

Points for Consideration

I. A. Faulty articulation within departments in regard to:

1. Course of study
2. Classroom procedures
3. Requirements by teachers

B. School routine:

1. Difficulties with new rules, new buildings, strange faces, new ways of doing things, etc.

II. Advisers fail in too many instances to recognize the values in and to use effectively the guidance aids.

Suggestions for Improvement

I. A. Departments should be responsible for:

1. Informing teachers as to content, standards, requirements, classroom procedures, etc.
2. Improving the articulation within the course of study
3. Improved common understandings and practices

B. Greater effort to prepare pupils for rules, requirements and customs in the schools to which they will go:

1. By principals, advisers and counselors in lower schools learning more about practices and routine of upper schools
2. Increased attention to the problem by the advisers of new pupils, during the first six weeks of the semester

II. A. Every adviser should make an earnest effort to become acquainted with the pupil's home background to acquire accurate information and to establish a feeling of cooperative interest between pupil, parent and adviser.

B. Advisers should develop ability to make and use records:

1. Make entries on master and adviser's records that will be accurate and sufficiently comprehensive to give a true report on the pupil
2. Study these data, check them carefully and use them in advising the pupil

Points for Consideration, Cont.

III. There is evidence that pupils are often not accurately and adequately informed as to the nature of studies to be taken by them or offered for their election.

- A. Lack of information previous to taking the course.
- B. Lack of information and appreciation of values in studies being pursued, misconceptions, wrong impressions.

IV. There is evidence that too many of the pupils do not have vocational plans definite to a reasonable degree, based on good reasons and with an educational plan in harmony.

- A. Too many pupils do not have a well defined plan by the time they reach the twelfth grade.
- B. In too many instances the expressed choice or preference is based on "liking it" rather than more legitimate and worthy reasons.
- C. Too great a percentage of the pupils express preference for professional and clerical occupations.
- D. In cases in which the vocational plan of the pupil is relatively uncertain or not well adapted to the pupil's ability, the educational plan is not likely to be well organized.

V. There appears to be an insufficient amount of guidance in the selection and participation in extracurricular activities; a lack of articulation in extracurricular programs, and too many pupils failing to participate in any well defined extracurricular activity.

VI. The data on master and advisory records and the character of the data supplied in answers to inquiries indicate that the adviser has a faulty or incomplete knowledge of his advisees:

- A. Data on pupil not significant.
- B. Knowledge about pupil not well organized.

Suggestions for Improvement, Cont.

III. A. Each department should furnish the needed information to advisers and counselors which will enable them to give pupils accurate and adequate information when the pupil's program of studies is being planned.

B. All teachers should make definite effort to reveal the nature, the values and the requirements of advanced courses in their department.

IV. A. The guidance system should be strengthened in its attempt to develop the understanding on the part of pupil, parent and adviser that a well defined and properly based vocational plan, at least to a point of the preference for a general occupational field, is desirable.

B. The adviser should develop better techniques in giving vocational guidance, directing the pupil to sources of reliable information.

C. The development in the senior high school of a centralized counseling service with one or more workers expert in this field.

V. Responsibility should be accepted by advisers and definite effort made to help every boy and girl find the activities in which they may participate with pleasure and profit.

Opportunity for talented pupils to develop their abilities through an extended program.

More opportunity for extracurricular activities which find their origin in the regular class work and provide opportunity for extended and enriched experience.

More opportunity for use of interests developed in the extracurricular in the improvement of the regular classroom work.

VI. The adviser should realize that he is a key person in an effective system of guidance.

The adviser should accept the responsibility for making recorded data not only accurate and reliable but intelligible to others who may need to use them.

A report of the findings has been presented to each faculty group. In each school, the principal has selected a few points for first attack. In one school knowledge of home backgrounds is one point selected for attention. The principal requested the advisers to make a visit to the homes of all new advisees.

The continuance of the plan was easier in the second semester and now seems well under way. Another point in which a great deal of progress is noted after a year of emphasis is the recording of data on master record cards. A number of other instances could be cited to show that the attention and emphasis have helped in efforts toward improvement.

The primary object of this study has been to check up on the results of our guidance program and bring to the attention of the adviser, counselor and administrator the points of fault and the needs for improvement. Increased attention to the problems of guidance and definite efforts to improve have resulted from this survey.

Illiteracy Drive in Shanghai

Although Shanghai has more schools in proportion to population than any city in China, even today 49 per cent of all children of school age are illiterate, and fully 25 per cent of adult Chinese there can neither read nor write.

These facts are set forth in a statement by General Wu Tehchen, mayor of Greater Shanghai, who pledges the city administration to provide more primary, middle and high schools this year, and to establish special schools for the education of adult illiterates. One vocational school, four new agricultural schools, and two nurseries for the babies of working mothers are also to be built.

Mayor Wu's plans for the city also include raising a fund of \$1,000,000 for the erection of six model villages inside the area of Greater Shanghai, which now has a population exceeding 3,450,000. These will provide 3,000 homes for poor workmen.

Happy to Say

By WILLIAM McANDREW

SALUTE of the Month. To Teacher Hazel Vance, Owl Hollow School, Indiana. Clarence Ferguson, 12 years old, fell into a thirty-four-foot well and was like to drown. Hazel tied children's jumping ropes together but Clarence was too exhausted to hang on to them. Somebody got a ladder. It was too short. Hazel gripped the lower rung with her knees and was lowered head first. She grasped the dripping youngster and called up, "You may draw, now." Clarence was, thereupon, educated, *i.e.* drawn out. Pulitzer prize should be awarded for best drawing lesson of the year.

A BOY finds washing a nuisance. Many men have so wonted themselves to the daily bath that the omission of it gives them mental discomfort, a remorse for a duty undone. This sense of unrest at poor performance is a power in teaching if you will only realize it. There comes a time in the continuous insistence upon proof of all their sums by your pupils, when, seemingly all of a sudden, the habit of self-checking becomes set. Thereafter, with judicious nursing by teacher, the boy's sense of incompleteness, if he leaves a computation unproved, will become a real distress. Anyone worth his salt who deals with figures would as soon leave a sum unchecked as he would pull his socks only half on.

A SCHOOLMASTER and I were paddling our canoe in the late afternoon close to a beautiful estate with a lordly mansion. The owner was host to a party of colorful guests taking tea on the shaded lawn. "If we had gone into business," said Tom, "we each might have owned a place like this and given pleasure to folks like these." "Tut, tut, my son. You are master of a palace bigger than this. You have a hundred times as many guests as these 200 days a year. They think more of you than these men and women care for their millionaire host. When the devil of envy tries to smear your mind count out loud the blessings that are yours."

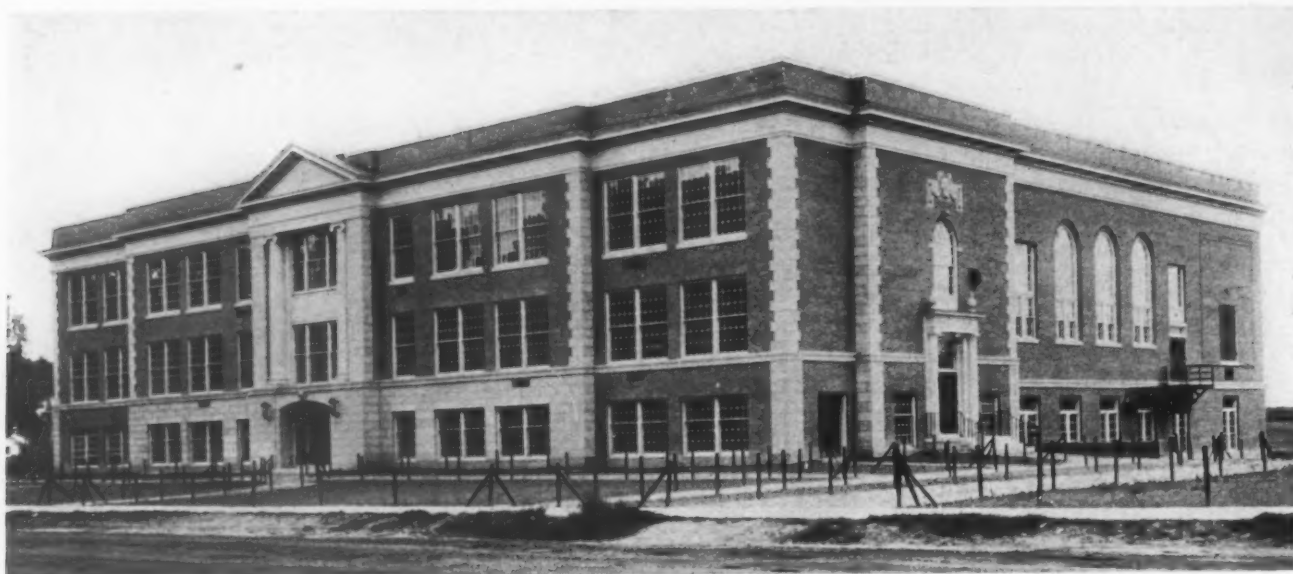
AN EDUCATIONAL revolution is at hand, said Harold G. Campbell, New York City school superintendent, at a banquet of high school teachers and principals. Education, said he, must lead; you must lead away from the selfish grabbing of wealth and power and from forgetfulness that our nation was established for the general, not the individual, welfare. Teach your children to discard the old "Live and let live" in favor of "Live and help live."

THE masterful man who can drive a herd of teachers forward was admired in 1900, in the days of New York's Maxwell. In 1915, during a high tide of educational research, we had school leaders so far ahead they were dimly seen in the mist. Now, we have the superintendents who say with teachers, "Let's plan and advance and go ahead together."

RALPH IRONS, Evansville superintendent, gets a blue ribbon this month for the bulletin he sends teachers. Every motion picture showing in town is appraised in regard to its suitability for young folk.



THE SCHOOL PLANT



Accent on Flexibility

By ROBERT J. FULLER

THE farsighted policy of designing a school building capable of varied adaptability is evidenced by the Hanover High School erected in Hanover, N. H., in 1934-1935. All of the classrooms and many of the special rooms are so constructed as to permit readjustments to meet the needs of more than one type of educational program without

undue expense. The plan of the building is such that almost indefinite enlargement can take place without excessive cost and without interfering with any part of the present structure or its orientation.

Several years ago the schools of the community became overcrowded. The demands of the citizens were insistent for more adequate teaching and learn-

ing facilities. Investigations resulted in reports and recommendations. The statistical material gathered, together with the nearly unanimous desire for an enriched educational program, pointed definitely toward the need for larger accommodations and provision for a greater number of so-called special rooms.

The school community accepted these reports as a basis upon which to frame its educational program. It was finally decided to utilize the opportunity to secure funds under the PWA for the purpose of carrying on this project under government supervision.

The building is of Georgian type, L-shaped, with an attractive front entrance, spacious corridors equipped with individual lockers and a separate auditorium and gymnasium. It is located on a broad street well back from the traffic line upon a large tract of land, entirely removed from any other building or undesirable obstruction or traffic. The orientation is of the best. To the rear is a pic-



turesque expanse of considerable proportions, with a beautiful mountain scene in the distance. The contour of the land renders it unlikely that any future development will interfere with light or sunshine or building expansion.

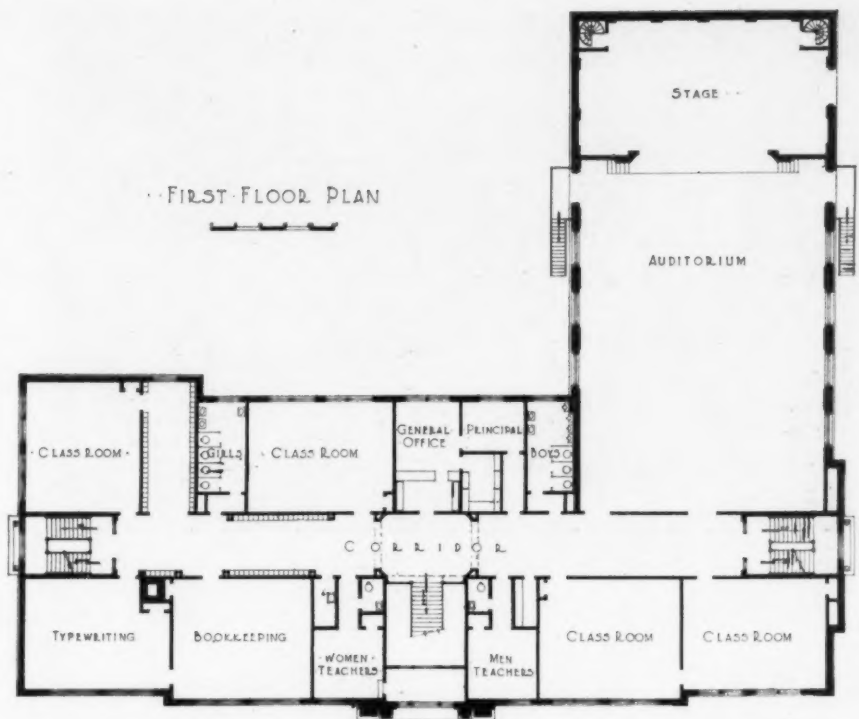
A side hill to the rear of the building makes possible the planning of the gymnasium and auditorium so that one is placed above the other with east, south and west direct light entering the gymnasium. This arrangement tended to decrease somewhat the cost of the building and at the same time provided the necessary areas. Contiguous to this lot and accessible directly from the gymnasium is an area of about eight acres, which has been partly improved and this provides adequate playgrounds, including football field, baseball field, tennis courts and other recreational opportunities. The outdoor program of activities is in no way subject to the hazards of traffic or to interference by other activities.

All drives to the building are of such width as to make easily possible the meeting of two cars. The plan permits busses to discharge their pupil passengers directly at the walks of the building without subjecting the children to the risks of accident because of passing automobiles. The drive at the southeast end of the building leads directly into a graded and surfaced parking area accommodating fifty cars. This relieves pupils who commute fifteen miles or so from the adjoining farming districts from the necessity of parking their cars in the streets or drives.

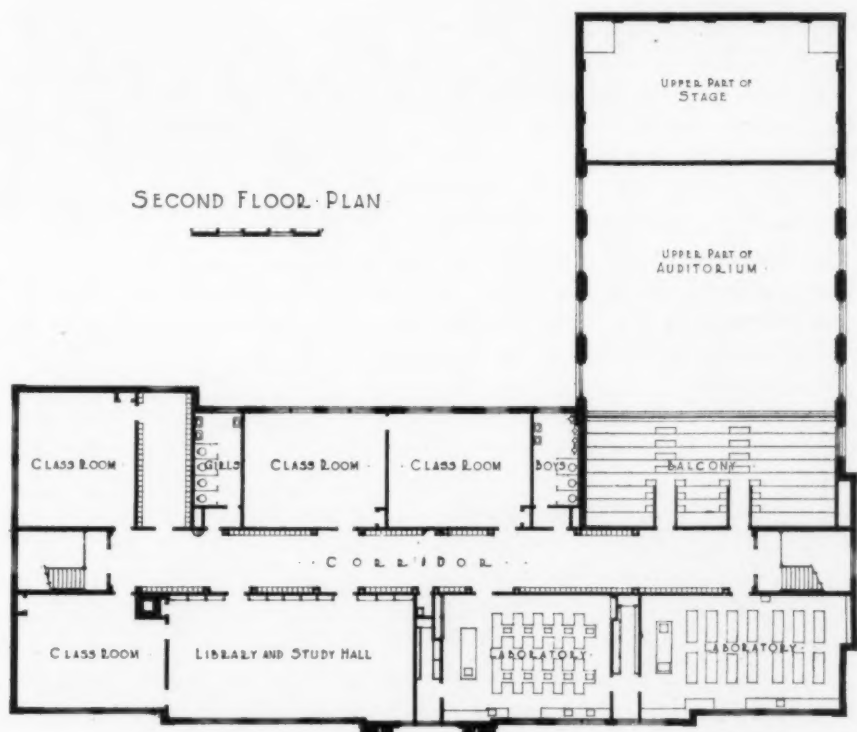
Much time and thought was expended in developing a building that would not only be an addition to the other architectural features of this college community but would at the same time provide for the present and future needs of a six-year high school.

Its maximum capacity is about 450, and there are approximately 350 enrolled at present. This provides for an increasing number of pupils without enlarging the plant.

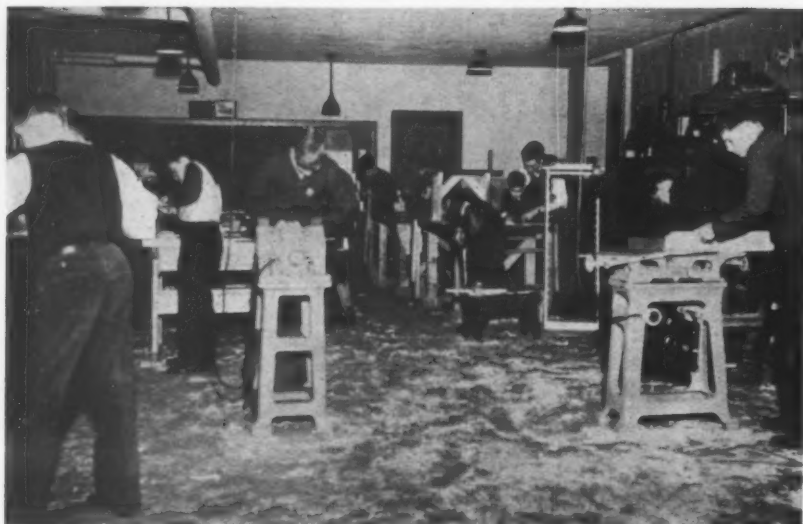
The entire building is ventilated by the direct method, by use of in-



Georgian in architectural style, the Hanover High School was designed by Wells, Hudson and Granger to meet present and future needs of the community for a six-year high school. Its maximum capacity is about 450. Total cost with equipment was \$205,000.



One evidence of the building's flexibility is the plan of administering the plant without the use of home rooms. After careful study, the library and study hall were combined. In this and in the classroom adjoining all pupils not engaged in recitation work are accommodated. One teacher finds it possible to supervise both rooms.



The boys' workshop is accessible directly from one of the main drives. Below is a typical classroom, movable furniture assuring flexibility. Each classroom, too, is equipped with built-in closet space. At the foot of the page is shown the entrance nearest to the parking area.

take circulating fans, so that fresh air is tempered over steam radiation and recirculated in the room, eliminating some of the expense in the more elaborately ventilated structures. This is in keeping with the investigation made a few years ago in New York State indicating that direct ventilation of this type, provided air was placed in circulation, was more healthful and less expensive than the types of forced draft ventilating or gravity systems.

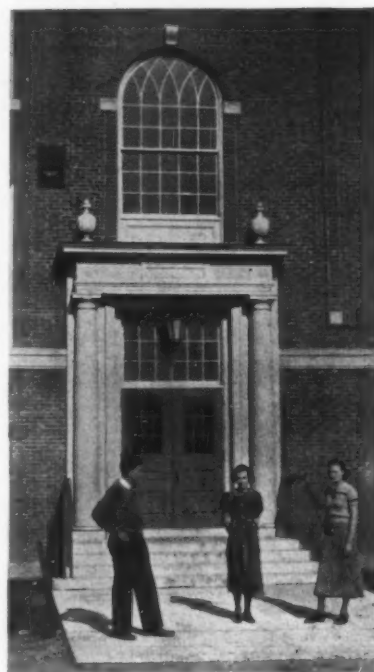
Three entrances are provided. Facing the main doorway an ample stairway leads directly to the first floor, flanked by two shorter stairways leading to the ground floor. The other entrances at either end of the long corridor lead into a fireproof stairwell through fire doors into the working areas of the building. Two exits are provided in the gymnasium—one at either end on opposite sides. One of these is for safety purposes only. The other is for the use of those who are engaged in athletic activities on the play field. These several exits make it possible to discharge the pupils directly out doors in the minimum time should emergency arise.

The classrooms are planned to accommodate groups of from twenty to thirty-five pupils. This means that not all classrooms are of uniform size. Partitions between the classrooms are floating partitions, that is, they are nonload-bearing. Should the educational program change or the need



change, these partitions can be removed or replaced at a minimum expense.

Each classroom has unilateral lighting. The windows extend nearly to the ceiling and are equipped with double shades which pull from the middle of the sash. A careful test has been made of this lighting arrangement. It has been found that the darkest desk in any one of the rooms has sufficient natural light to provide for average work upon almost any school day. The only exception to this may be that in the extreme short days of winter in this part of the country it will be necessary to utilize artificial light. The installation of electric lighting is such that during all days only one-half of the



lighting facilities need to be utilized.

Each classroom in the building is equipped with built-in closet space. All furniture is of the movable type consisting for the greater part of the table-chair seating unit. This makes possible a variety of classroom seating plans. Study groups and conference groups can move their desks into a unit arrangement and confer upon problems of the recitation or do advanced work without interfering with any other activity that may be carried on in the room. This enables the instructor to give particular attention to meeting the needs of pupils with varying abilities.

One evidence of the flexibility of the building is the plan to administer the plant without the use of home rooms. The fireproof corridor walls are of sufficient thickness to accommodate recessed lockers at all available areas. Each pupil has a full length locker equipped with bookshelf and combination master-keyed lock. This has facilitated care of personal property and access without disturbance to classrooms.

The elimination of the home room plan necessitated provision for a study hall to accommodate about ninety pupils. Careful and economic planning entered into this part of the project. The resulting study hall is combined with the school library. This large room serves the two purposes and is occupied almost the entire school day, including the noon hour, since many pupils are obliged to bring their lunches.

Adjoining this room and accessible to it directly through doors at either side is one of the classrooms. These two rooms care for all of the pupils who are not engaged in regular recitation work in the other classrooms. Conservation of teacher hours has been effected by this combination as one teacher finds it comparatively easy to supervise both of these rooms.

The laboratories are equipped with thoroughly modern furniture. The combination physics and chemistry laboratory has the desk type of equipment with a large demonstration desk for the instructor. Even though the



Spacious corridors equipped with individual built-in lockers are a feature. The commercial unit, below, is within easy access of the headmaster's office, making possible a program of office practice.



building is located in an area within which there is neither commercial nor natural gas, provision is made for carbide gas so that the laboratories are complete in respect to all services. A built-in hood, operated by a suction fan, takes away the fumes.

The second laboratory is used for general science, biology and zoology. This room is equipped with the regulation, flat-topped biology tables, properly treated. More attention was paid to providing each pupil with a broad work area at his station than with supplying him with any number of extraneous pieces of equipment. In other words, it is the accomplished aim to provide a genuine workroom and laboratory which would meet the needs of a variety of scientific activities.

The domestic arts workroom is a combination of the unit kitchen and general laboratory, with an area for a dining table and service. Contiguous to this and served from it by a separate cooking unit is a moderately sized cafeteria. This cafeteria illustrates what may be done in a small high school to utilize areas more continuously during the school day and to have them serve more than one purpose. The room is used for sewing and instruction in the general care and upkeep of wholesome home surroundings.

The boys' shop is accessible directly from one of the main drives. It is a commodious room and provides adequately for the conduct of a general shop. Power is available. The present offering is wood working, metal working, electrical working and general home repair work. This shop, the typewriting room and the corridors are all soundproof.

Arrangement for Office Practice

The commercial unit is located on the first floor within easy access of the headmaster's office. The two contiguous rooms make possible a unified program in the commercial subjects and provide adequately for practical work in office practice. The pupils of the senior class are given definite assignments in the administrative of-

fices and are able to complete those assignments in the administrative offices and the commercial rooms without unnecessary travel or confusion.

The success of this type of planning has more than justified the additional thought on the part of the architects and the insistence upon the part of the educational interests that this useful unit be located where the boys and girls could secure maximum benefits from the practical training that they receive.

Health Unit Is Self-Contained

A health unit, situated in nearly the center of the building on the ground floor, is equipped with hospital furniture, of white enamel finish, including desk for the nurse, medicine cabinets and cot. A separate lavatory makes it a self-contained unit providing for temporary medical attention. It serves also as the examining room of the medical director, who makes sure that pupils entering any type of competitive athletics are thoroughly examined and show no evidences of weaknesses.

The auditorium and gymnasium are located in the southeast end of the building. They may be reached through the west and central entrances without traversing any other part of the building. The gymnasium is of the usual type and provides for a variety of recreational and physical activities. The ceilings of both of these rooms are soundproofed. Boys' and girls' showers are approached directly from the gymnasium and the ground floor.

Gymnasium and auditorium are connected by spiral stairways leading to the stage. This leaves the stage area free for dramatics without the necessity of off-stage dressing rooms. These stairways end in soundproofed entrances, which make possible the utilization of both rooms simultaneously.

The auditorium is designed for several purposes. Musical activities, community gatherings, lectures and assemblies are held in this room. The seating capacity of 760 will permit

expansion of the plant and increased enrollment, and meanwhile it cares for large community assembly groups. A part of this seating capacity is a gallery with approximately 180 seats.

The stage is 30 feet deep with a proscenium arch 28 feet in width. The stage is equipped with cyclo-rama, velours curtains and teasers. Great care was taken in interior decoration. Though simple in treatment, auditorium walls and stage, both as to arrangement and coloring, have considerable richness of aspect.

The total cost of this building, fully equipped, was \$205,000 exclusive of land. Plans have been made for landscaping that will harmonize with the surrounding areas, thus making the high school an integral part of a growing community. It is expected that unless social conditions or other unforeseen forces bring changes, the building will long serve the educational interests of the community as a six-year high school.

Walls Put on a Stone Face

When is stone not stone at all? The answer is revealing. When it takes the form of a mulsified plastic texture material ready mixed for application with a brush or trowel to any wall surface. This product, to be more exact, has a base of cement and oil. One application and the wall takes on the form of stone finished coarsely or with a surface as smooth as highly polished marble.

Ceilings, too, respond successfully to such treatment, particularly when an old English effect is desired. It is also surprising what miracles it can perform in simulating a stone fireplace either for the school library or executive offices. For such purposes, it comes prefabricated in large sheets which cut and fit like lumber—ideal for false linings and hearths.

Plain colors in oil can be added to provide greater warmth and variety in effect. Maintenance is simple. The finished surface is fire resistant, is not affected by heat, cold or moisture and can be kept clean and sanitary merely by washing with soap and water.

Selecting the School Custodian

By H. H. LINN

WE DO not have civil service requirements for custodial workers in the schools of Muskegon, Mich., although we attempt to give the benefits of civil service to our employees. Applicants for the position of school custodian must apply in person and must fill out an application blank in the nature of a questionnaire. References are carefully checked to learn how satisfactorily the applicant has fulfilled his duties in former positions.

Personal impressions count somewhat in making a selection. We prefer, of course, clean looking candidates with an agreeable personality, who give evidence of being able to work harmoniously with children, teachers and the public. When openings occur, those applicants are selected who appear best to meet our particular requirements.

Six-Month Apprenticeship

They serve under selected head custodians for a period of six months before being formally appointed. These head custodians are selected with the training of apprentices in view and at the end of a six-month period, it is usually possible for them to determine what the new men can and will do.

Preference is given to applicants who have taken high school work or even college work, and men with a mechanical aptitude are preferred to the ordinary run of common laborers. In our school system two of our high grade custodians have had some college training.

For cleaning jobs, we have found capable women superior to men. There are certain types of work, of course, that women cannot do, such as moving heavy furniture, climbing

ladders and shoveling snow, but they seem to see dirt in corners and in general have a better idea of neatness than does the average man. Both men and women are employed in our schools and we feel that much would be sacrificed in our school buildings if the positions were to be filled entirely by men.

Special Bulletins for Janitors

We have established certain general qualifications for school custodians, which have been put in bulletin form, one of fifty bulletins that are being developed for our janitorial staff. Each bulletin deals with a specific topic and is phrased in language that is appropriate to the reader.

The custodian learns, for example, that first of all we expect our employees to be American citizens, either American born or naturalized. Our public schools are trying to develop and raise American standards and principles, and should be served by those who know, respect and believe in these standards and principles. This nation has an ample supply of high grade American citizens to fill all public positions without requiring the services of other persons, who,

while they may be good workmen and otherwise splendid, still owe allegiance to foreign nations.

New employees are selected from among those between the ages of twenty-one and forty-five. Other things being equal, preference is given to those between the ages of twenty-five and forty. There are many able persons of from fifty to sixty years of age who might develop into excellent custodians, but the older the men are when they start with us, the fewer years of good service we may expect from them. This sounds as if we want our employees to stay with us a long time. Frankly, we do, although we favor a maximum retirement age of seventy.

Younger Men Are Preferred

Now, if our workmen are to retire at the age of 70, a man entering our employ at the age of thirty-five has thirty-five more years of service, while a man of sixty has only ten years of service. Furthermore, since it takes several years for a man to develop into a first-class custodian, the older man has few of his most useful years left for us. We also recognize the fact that the older men are slower in their actions, are more likely to have poor eyesight or hearing, and many have developed

What are the qualifications of a good custodian? Mr. Linn, assistant superintendent in charge of business at Muskegon, Mich., lists the following: good health, good character, American citizenship, local residence, at least an eighth grade and preferably a high school education, mechanical skill, good judgment, neatness and courtesy, and several other requisites.

certain habits that interfere with their employment.

It has been our experience, however, that the older men often are more reliable and dependable than some of the very young men, and this is one characteristic that appeals to us. We are not interested in a man who wants work only until he can get into something else. We want men who, if they possess the proper qualifications, will want a steady job and will strive to fill their positions so well that they may consider themselves set for life.

We prefer married men with families. As a rule, married persons are steadier, have a greater sympathy for children and appear to have greater tolerance for others.

Physical Exam Once a Year

School employees must be strong and healthy. There is a certain amount of lifting, carrying and climbing that must be done. Good health is essential, for employees who are ill may spread disease through their contacts with the children and teachers. We believe that all new employees should pass a physical examination before they are employed and should be examined once a year thereafter.

All employees are expected to be of good character. To a certain extent, they are examples for the children in school and they ought to be the type that the children can respect and follow.

We prefer to employ citizens of the community. As a rule they take a greater interest in local affairs and institutions. There is a certain reluctance on the part of local taxpayers at having their tax monies used to pay salaries to those who live and spend their money outside the community.

All school employees should be able to read, write and speak the English language. They must be able to read as they will receive written instructions from time to time. They must be able to write as they have certain records to keep and reports to make. They must be able to converse with

pupils, teachers and the public. Furthermore, it seems out of place for one who is unable to read, write or speak English to be working in an institution that is dedicated to the teaching of all three.

In selecting new employees, preference is given to those who do not habitually use intoxicating liquors, drugs or chewing tobacco. A man who comes to school intoxicated or with the smell of strong liquor on his breath is unfit to be among school children. No drug addict has a place in a school building as he is a menace. Chewing tobacco is a filthy habit. The school is an institution attempting to teach the children good habits and school employees should not possess habits or tastes that are undesirable.

We prefer to employ persons who have enjoyed some of the advantages of education. Today we should have no difficulty in selecting men with at least an eighth grade education; other things being equal, we favor the man who is a high school graduate. Persons who have attended our public schools have a better appreciation of the many problems confronting school employees than those who are not familiar with the aims and activities of this institution.

Mechanical Ability Needed

Since the average custodian has so many little jobs of a mechanical nature to perform, we are inclined to favor the applicant who is handy with tools and who might be classed as a "Jack-of-all-trades." Men who have had experience in the building trades such as carpenters, plumbers, painters or electricians may be useful on repair crews during summer vacations and may sometimes be given special consideration if they desire the more permanent position as custodian and otherwise meet the qualifications established.

Other things being equal, we prefer to employ persons who are intelligent. Intelligence and education are not the same thing. Many intelligent persons have not had the advantages of much schooling, yet they have good

minds and a great deal of common sense. A school custodian must do more than follow orders. He must be able to think for himself when something comes up that requires an immediate decision.

A school custodian's position is a full-time job; the custodian is expected to give his time and energy during his working hours to it. As a rule we expect a full-time custodian not to have regular work outside of school hours as this will sooner or later change his interest or dissipate his energy.

Qualifications Sought

To summarize briefly the qualifications we require:

1. The custodian must be an American citizen.
2. He must be between the ages of twenty-one and forty-five, with preference given to applicants who are between twenty-five and forty years of age.
3. He is given preference if married.
4. He is expected to be healthy and able bodied.
5. He must be of good character.
6. He will be given a preference if he lives in the community.
7. He must be able to read, write and speak the English language.
8. He will be expected to refrain from the habitual use of intoxicating liquors, drugs and chewing tobacco.
9. He is expected to have enjoyed the advantages of at least an eighth grade education. High school training is considered more desirable.
10. He should be courteous and gentlemanly in attitude, and neat and clean in appearance.
11. He will be given a preference if he is fairly skillful in some mechanical line, or if he is a general all-round "handy" man.
12. He will be given a preference if he is reasonably intelligent and indicates that he possesses common sense.
13. He must be willing to give his full time and energy to his school job during the time he is scheduled to work for us.



Photographs by courtesy of Architectural Record

Built in Terms of Sport

By WILLIS N. MILLS

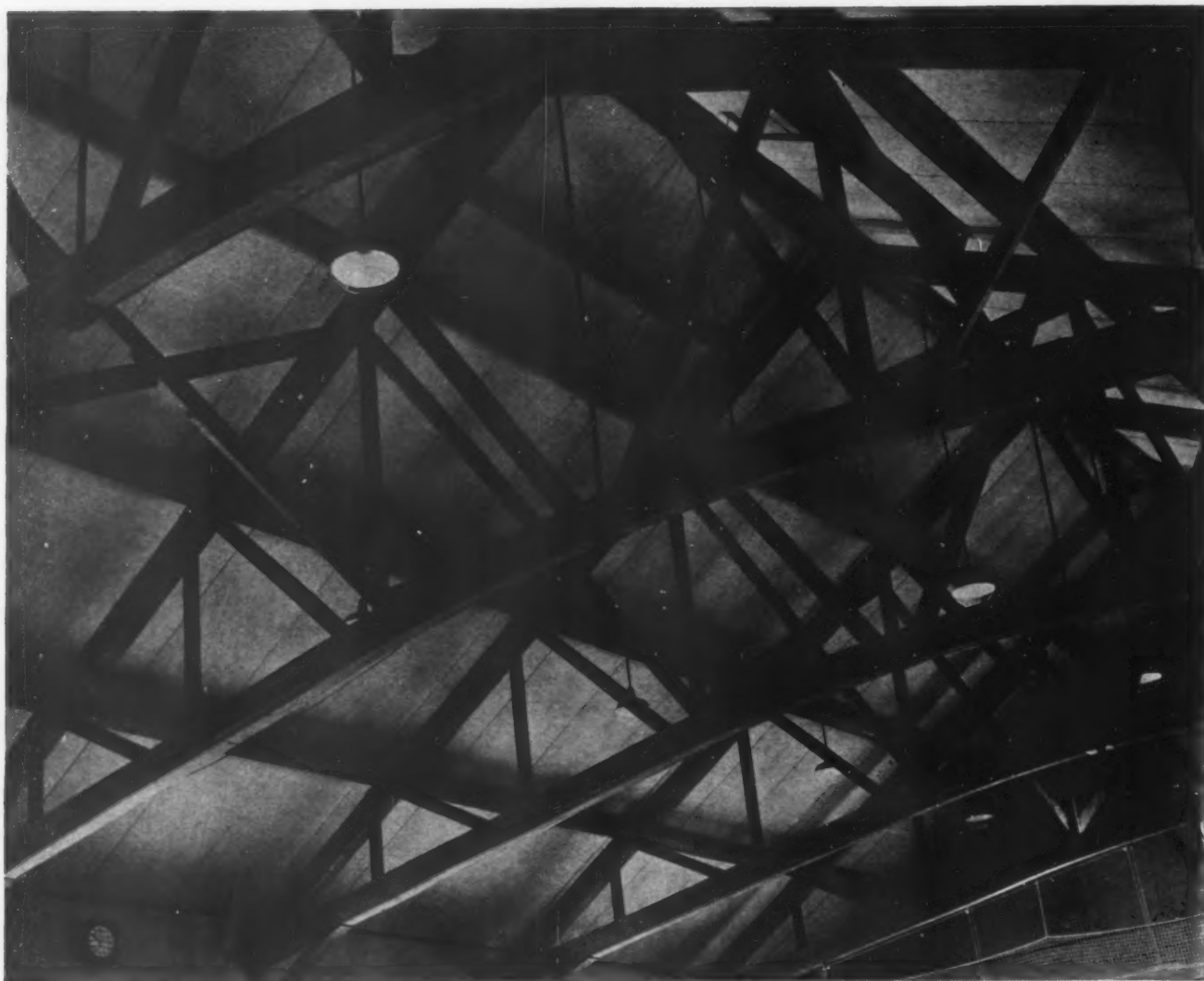
Kent School required a sports building that would meet certain requirements, fall within a limited budget, and be maintained economically. Mr. Mills explains how this problem was solved.

IN THE spring of 1934, it was decided that the Kent School, Kent, Conn., should have a sports building. Previously, winter sports had been entirely dependent upon the weather with resultant periods of inactivity. A limited budget was available, however, and low maintenance essential.

The requirements were as follows: (1) Two practice courts for basketball, one exhibition court, provision for spectators, handball and indoor tennis courts, space for wrestling, boxing and rowing machines; (2) two locker rooms, each with showers and toilets; (3) harmony in appearance with existing school architecture; (4) an approximate cost of \$25,000, which automatically dictated a non-

fireproof building, and (5) a minimum maintenance.

With the foregoing essentials in mind, plans were started. Dimensions of 60 by 106 feet were finally selected as the most practical size and proportion for the main floor. This allows two courts to be run in the 60-foot width of the room. The separation between the two is accomplished by a net suspended from the trusses above. This size also permits a standard exhibition court to be placed in its length with space at either end and at the sides for about 300 spectators. Located at diagonal corners of the room are handball playing walls. In the early spring, before the tennis courts are dried out, a standard tennis court occupies this space.



A clear height of 22 feet was maintained under the center of the roof trusses. Because this head room was not essential at the outside walls, the bottom chord of the trusses was curved, which adds a pleasing line.

A clear height of 22 feet was maintained under the center of the roof trusses. Inasmuch as this head room was not essential at the outside walls, the bottom chord of the trusses was curved, partly to reduce the height of the building and partly to add a pleasing line to the interior. The framing for this space, both for roof and floor, was divided into bays of 15 feet, which proved to be economical spacing.

Walls Acoustically Treated

This room is lighted from the sides and ends by twelve high windows each 5 by 12 feet. They are protected by heavy wire guards and slotted down the center for window pole operation. The window sills are set

slightly above the eye line (6 feet from the floor). Below this line the room is finished with a wood wainscot stained a light gray. Above this line the walls and underside of the roof are sheathed in a neutral colored acoustical material, 1-inch thick.

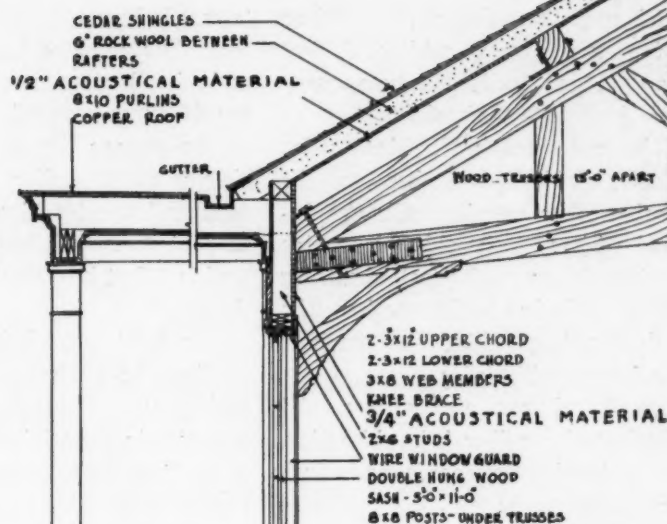
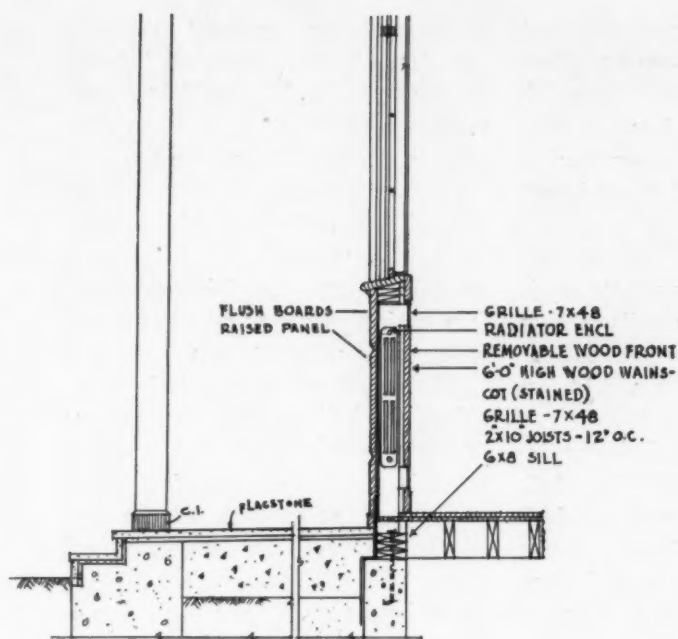
The room is heated by radiators recessed behind the wainscot. These are amplified by fans or blowers at either end of the room, used to deflect the heated air downward to the floor. This makes it possible to raise the temperature of the air at the breathing line in a comparatively short space of time.

In the basement a space, 30 feet square, is provided in a well ventilated and lighted corner for wrestling or boxing. Sixteen rowing machines

are placed adjacent to this space. The locker rooms and toilet facilities are raised 2 feet above the normal basement floor in order to send the waste and sewage to the disposal system more economically. The school and visitors' dressing rooms have access to the main floor by stairs at diagonal corners of the building.

Providing Hot Water

A study of the hot water requirements for showers indicated that it was desirable to take care of a large load in a short space of time. For this reason, an insulated 1,500-gallon hot water storage tank was included to satisfy this demand most economically and avoid oversizing the water-heating equipment.



Diagrams by courtesy of Architectural Record

The site selected for the building centers on the side of the football field. Other buildings in the group around the athletic field consist of a field house and several masters' cottages, all of which are small in scale. The problem of harmony with the smaller buildings was solved by introducing a delicate scale in the high porch overlooking the playing field. This porch serves as a shelter for some of the bleachers during football games.

A simplified adaptation of American colonial architecture was chosen

because it seemed to harmonize best with the existing buildings.

With respect to low maintenance, the problem of heating such a large space was paramount. This problem had three phases: initial cost, fuel consumption, rapid pick-up of the system preliminary to its use and correspondingly rapid let-down after occupancy.

After careful consideration of the uses of the building and the limitations of the budget, a well designed one-pipe steam system was selected as the heating medium.

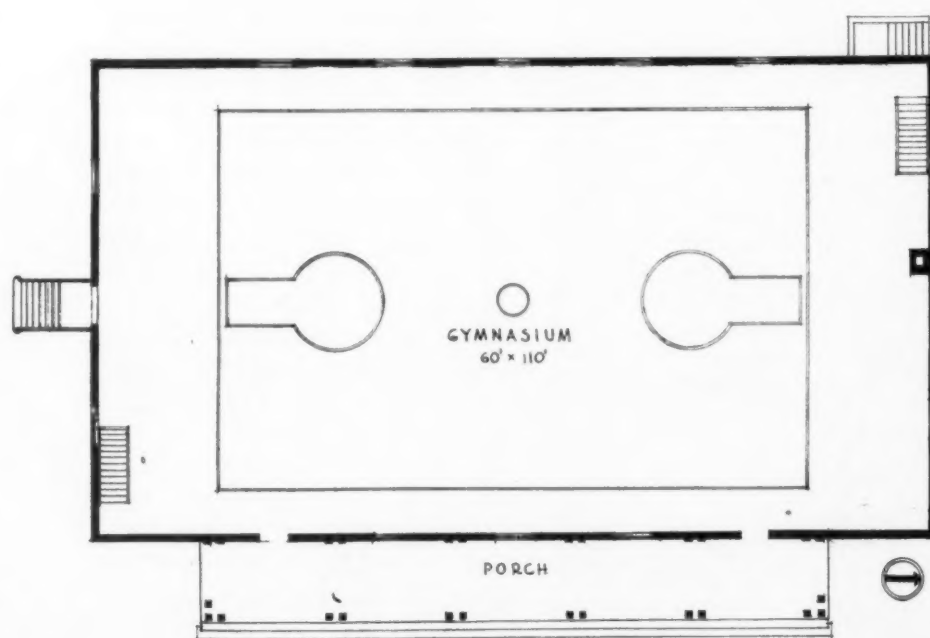
The problem of fuel consumption seemed best solved by extensive insulation. Consequently the entire roof area was packed with insulating material 6 inches thick, selected because it was waterproof and fireproof, thus eliminating the possibility of flue action in the roof construction and reducing the fire risk. In addition to this insulation the walls and ceiling were finished in acoustical material.

Quick Heating System

The rapid pick-up seemed best accomplished by the use of an oil burner together with two blowers in the gymnasium. These act as boosters and make it possible to raise the temperature 15° F. in half an hour when starting from a cold system.

In order to cut down on future painting costs, all of the interior woodwork was stained. The color selected was a light blue-gray. This with the natural acoustical material on the walls practically eliminates any interior repainting.

Some of the construction details are interesting. Footings, foundation walls and basement floor are cement, the last being finished in waterproof cement. The first floor is framed with wood joists running parallel to the direction of the finished floor to add resiliency. The joists are carried on steel girders and round cast-iron col-



umns. Exterior wood walls consist of 2 by 6-inch studs with 8 by 8-inch posts under the six wood trusses which span the width of the building and support wood purlins 8 feet apart. These purlins, in turn, carry the 2 by 6-inch roof rafters.

The roof consists of 18-inch cedar shingles laid $5\frac{1}{2}$ inches to the weather. The exterior walls are finished with 12-inch wide white pine clapboards over diagonal sheathing and laid 9 inches to the weather. The flush boarding behind the porch is ship-lapped white pine.

Porch columns are cypress. All other exterior millwork is white pine. All millwork, clapboards and flush

boarding are back painted with lead and oil paint. The gymnasium floor is first grade hard beech. The porch terrace is flagstone (random rectangular). The porch roof, gutters, leaders and miscellaneous exterior metal work are 16-ounce copper.

The sewage disposal system consists of a 2,000-gallon concrete septic tank and two leaching wells laid up in field stone with open joints. Each well is 9 feet in diameter and 14 feet deep.

The total cost of the building, including the equipment, tower clock and sewage disposal system, which were not in the original contract, was \$28,800, or 11.3 cents per cubic foot.

is the equipment for night athletics. The football playing field is lighted by ten batteries of floodlights providing perfect night illumination. The floodlights possess a capacity of 63,000 watts and are so placed as to give all parts of the field not less than 7.8 foot candles. Shadows are nonexistent and the lighting makes it possible to see even a ball of regulation color at night.

The stands, which are at the west side of the field, are made of wood on concrete foundations. Each row of seats is constructed with foot rests and a walking passage. At the top of the stands is an enclosed press box, which will accommodate a public address system and a half dozen or more news correspondents.

Parking space sufficient to accommodate 500 cars is adjacent to the field and more than adequately takes care of this important problem in handling crowds. During the first season's use, gate receipts were sufficient to cover about half the total cost of installation. It is estimated that the new field with lighting equipment and stands represents an investment of more than \$10,000.

A Field for Sport

By W. J. JUDD

FOR some time it had been the desire of the authorities of Darlington School, Rome, Ga., to increase its athletic plant in order to make it more effective for handling the athletic program. This hope was realized last summer when friends of the school in Rome agreed to underwrite the construction of a new athletic field. Early last fall work was started and by the opening of football season

the new plant was available for use.

Two well-sodded playing fields are provided, one for practice and the other for scheduled games. New stands will seat comfortably about 2,500 persons. A cinder track of slightly less than 880 yards in length has been added, and the baseball field has been recently reconstructed.

Entirely new in prep-school circles in this section of the country

Suggestions on High School Football

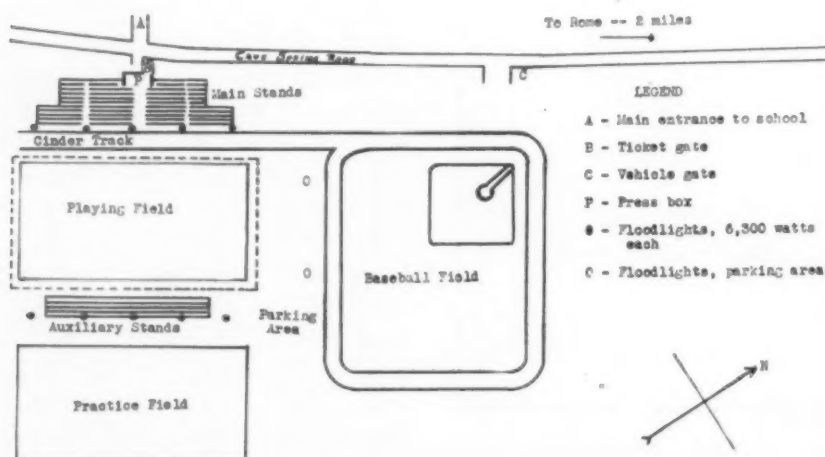
We need to "deemphasize" high school football, in the opinion of Dick Hyland, former star halfback at Stanford University.

Allow high school teams to play only two or at most three games a season, Hyland suggests. Do not allow boys to play who cannot pass a rigid physical examination before every game. Watch the size, weight and age of competing teams and do not overmatch squads.

For the younger and weaker high school boys and for sand-lot players, a perfect game presents itself, Hyland says. It is touch football. In it a touch takes the place of a tackle. It will teach the players to pass, kick and handle the ball. If they know these three things well, any college football coach will welcome them later with open arms.

DARLINGTON SCHOOL, ROME, GA.

New Illuminated Football Field and Athletic Plant



General plan of the new athletic field at a Southern private school.

Lunch in a Country School

By MARY SPALDING

IS THE school lunch having the benefit of a consultation service from a skilled lunchroom manager, as the plans for the new school are being drawn, or is it still entrusted solely to the architect and the equipment salesperson together with the superintendent and perhaps a school committee?

Before a modern hospital is built, the superintendent, the head of the medical staff, the supervisor of nurses, the dietitian and other department heads are called to discuss various parts of the plant with the architect, so he may have the benefit of their trained viewpoints. Such forethought for all new schools would do away with the makeshift lunchroom found tucked away in an unattractive and inconvenient corner of the smaller school, even of the new consolidated school of today.

Able Manager Is Needed

Schools are cutting building costs to essentials. To one interested in an adequate noonday meal for children, the lunchroom in the country school to which children come from a distance, is indispensable. It is essential for the service of the right kind and amount of foods for growing children, and it offers an opportunity to teach the children to choose foods wisely with regard to their needs and pocketbooks.

An able school lunch manager is needed to foster the development of the lunchroom and to adapt it to the children and teachers served. Few small schools can employ a full-time person for this job. The home economics teacher may give part of her time.

A school of 100 can afford a part-time person. Some schools are fortunate in finding a local person who can handle purchasing, preparation

and cooking of foods in large quantities without losing sight of the nutrition value of foods and their presentation in popular form.

The lunchroom has the advantage of arousing child and teacher interest. Health and social activities may be built up with the lunchroom. Children may assist with menus, with the preparation of certain dishes and even with the decorating by making tables, chairs and curtains. In this way the lunchroom becomes their own room.

Help From Community

When the community has been kept informed of the needs of the lunchroom, it has joined in the support of the lunch by contributions of canned goods and winter vegetables and fruits for the lunch cupboard and by donations towards lunches for needy children.

In one lunchroom I know, for example, a small group consisting of a school committee member, the lunchroom manager and a few friends put up vegetables and fruits for the year. They gathered these in the fields to get half rates, with the object of giving wholesome foods to children and keeping out of debt.

Teachers give support through

Lunchroom service in the country school is indispensable, Miss Spalding points out. It should provide the right kind and amount of foods for growing children and the opportunity for wise choice with regard to needs and to pocketbooks.

health education with the children, using the lunchroom as a practice field. The principal plans with the manager, teachers and children for a pleasant lunch hour.

In Massachusetts the department of public health employs a nutritionist to assist with school lunches as part of its school hygiene work. She helps the lunchroom manager with details of equipment, buying, arrangement and bookkeeping. This nutritionist has many requests for help. Of course, she cannot take the place of the good manager who gives daily service, but she can render practical assistance to the manager, the school committee and the superintendent. The employment of such a person by state departments of education or of health is of real economic as well as of health value.

Staggering Lunch Periods

Real ingenuity is needed in many of the old country schools. In some it has been shown by staggering lunch periods when a small room does not offer sufficient space for all pupils to sit and eat. This means more supervision by teachers, but many volunteer their help. In a few schools the women of the neighborhood assist in service and supervision as a community project.

Not only is space for eating likely to be lacking in these old schools but also space for storage and refrigeration. A vegetable cellar, a new cupboard and a refrigerator have actually provided savings by making it possible for the manager to buy in quantity. Changes can sometimes be brought about in old schools at a minimum of expense or by volunteer labor.

It is suggested that boy and girl leaders hold lunch and recreation clubs at the noon hour. Such clubs might save part of the lunches that

go into the wastebasket so boys can play ball. They would also divert the nickels to milk instead of to chocolate bars, or make popular a better sandwich than a mustard sandwich.

As the school lunch is one of the pupils' three meals per day, it concerns closely the home. Some managers (See "Parents Check School Menus," The NATION'S SCHOOLS, February, 1936) win parent cooperation by sending home menus for a week. In this way the day's meals may be better rounded, and the manager may buy more exactly.

In Massachusetts the department of health and education held a week's conference for lunchroom managers at Fitchburg State Teachers College during the summer of 1935. This year the department is organizing a conference for less experienced man-

agers from country towns asking townspeople to provide transportation to reduce the cost to the manager. At the conference the managers will have a chance to buy, prepare, and serve lunches, to keep accounts and to learn tricks of salesmanship — not only to "keep out of the red" but to help in building up better nutrition for the children served.

The following material has been prepared by the nutrition service of the state department of health in order to meet some needs of the schools and to keep the public informed:

For teachers in one and two-room country schools: "The Hot Dish for the Country School."

For lunchroom managers in small schools: "Three Weeks' Spring Menus," with recipes based on a fifteen-cent lunch, which is the amount

a survey showed the children had to spend.

For children in elementary grades: "A Measuring Stick for a Good School Lunch," "Food for the School Child" and "Keeping Well."

For high school children: "Food Value Posters," "Food for the Teens," "Healthful Living" and "Cooking for Health."

For superintendents and community leaders: survey card to find the needs.

Articles on the growth and development of lunchrooms have appeared in various state publications. Posters representing lunches in different countries are available as a loan exhibit.

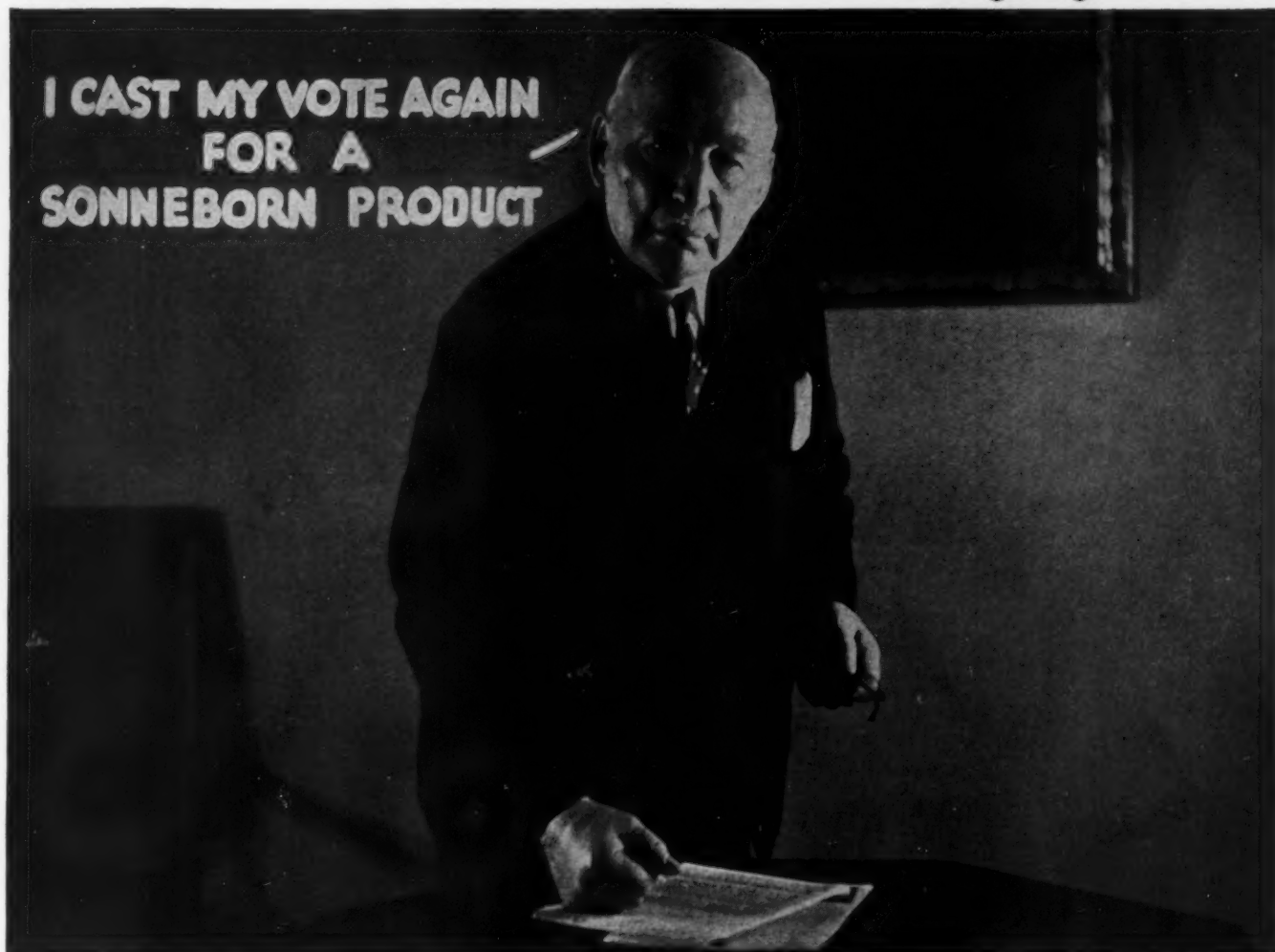
Some typical spring menus selected from the three weeks' menus prepared by the state department of health are given on this and the next text page.

Typical Spring Menus*

Day	Quantities for 25	Quantities for 100	Recipes
Monday			
Escalloped Cabbage and Cheese	Cabbage, shredded coarsely—10 lbs. White sauce, medium—1½ qts. Fat—4 tbsps. Cheese—¼ lb. Salt—2 tbsps. Bread crumbs—2½ cups	Cabbage, shredded coarsely—40 lbs. White sauce, medium—7 qts. Fat—1 cup Cheese—1 lb. Salt—½ cup Bread crumbs—2½ qts.	Escalloped Cabbage and Cheese Boil cabbage until tender. Add fat, salt and grated cheese to white sauce. Arrange cabbage in baking dish, cover with cheese sauce and top with bread crumbs. Brown lightly in hot oven.
Bran Muffins	Shortening—½ cup Sugar—½ lb. Eggs—3 Bran—¼ lb. Sweet or sour milk—1 pt. Flour—4 cups Soda—1 tsp. Salt—1½ tps. Baking powder—3 tps.	Shortening—2 cups Sugar—2 lbs. Eggs—12 Bran—1 lb. Sweet or sour milk—2 qts. Flour—16 cups Soda—1 tbsps. Salt—2 tbsps. Baking powder—3 tbsps.	Bran Muffins Cream shortening and sugar. Add eggs. Mix and sift flour, soda, baking powder and salt. Add bran to creamed mixture, then milk alternately with dry ingredients. Pour into greased muffin tins and bake in moderate oven (375° F.) for twenty minutes.
Stewed Apricots	Apricots—2½ lbs.	Apricots—10 lbs.	Stewed Apricots Soak over night. Stew with little water and sugar. Use two slices of lemon to bring out flavor.
Tuesday			
Lettuce, Egg and Macaroni Salad	Eggs—2 doz. Macaroni (cooked)—4 cups Lettuce—3 heads Mayonnaise—1 cup	Eggs—8 doz. Macaroni (cooked)—12 cups Lettuce—12 heads Mayonnaise—1 qt.	Lettuce, Egg and Macaroni Salad Hard cook the eggs. Chop eggs, macaroni and outside lettuce leaves. Add mayonnaise. Serve on lettuce leaves.
Dark Bread and Butter Sandwich	Bread—2 1¼-lb. loaves Butter—½ lb.	Bread—8 1¼-lb. loaves Butter—2 lbs.	
Hot Ginger Bread	Fat—¾ cup Sugar—¾ cup Egg yolks—5 Molasses—1½ cups Sour milk—1½ cups Flour—5¼ cups Cloves—1 tbsps. Soda—1½ tps. Cinnamon—2 tbsps. Ginger—1 tbsps. Salt—¾ tsp. Baking powder—1½ tsp.	Fat—3 cups Sugar—3 cups Egg yolks—20 Molasses—4½ cups Sour milk—4½ cups Flour—21 cups Cloves—4 tbsps. Soda—4½ tps. Cinnamon—8 tbsps. Ginger—4 tbsps. Salt—1 tbsps. Baking powder—2 tbsps.	Hot Ginger Bread Cream butter, add sugar. Add beaten eggs, molasses, and beat well. Sift together dry ingredients and add alternately with sour milk. Pour into greased and floured tin. Bake at 350° F. about forty minutes.
Apple Fluff	Apples—6 Egg whites—6 Sugar—¾ cup	Apples—24 Egg whites—24 Sugar—3 cups	Apple Fluff Pare apples and grate. Beat egg whites stiff but not dry. Add sugar gradually, a few drops lemon juice, then grated apples.

SONNEBORN PRODUCTS

have stood the test of years.



**I CAST MY VOTE AGAIN
FOR A
SONNEBORN PRODUCT**

Rigid tests for years in schools, industrial plants, and homes have proven that **SONNEBORN'S WATERPROOFING, DAMPROOFING and PAINT PRODUCTS** are reliable.

School and plant superintendents, builders and painters have reordered them, architects have repeatedly recommended them because they have learned by comparison that they can use **SONNEBORN'S** products efficiently and economically.

Competent laboratory technicians, through scientific research have kept these products abreast of the times in the building field—this experience together with a complete engineering department is ready, at all times, to help you if you have a **WATERPROOFING, DAMPROOFING, or PAINT** problem.

Write today for literature on **SONNEBORN'S** tested products.

Sonneborn's Tested Products

LAPIDOLITH—The guaranteed method of securing dustproof concrete floors.

LIGNOPHOL—A scientific penetrating preservative and finish for wood floors.

HYDROCODE COLORLESS—For exterior waterproofing of masonry walls.

SONOMEND—For patching and resurfacing wood and concrete floors; an easy to use method for prolonging the use of floors.

KAUKIT — Non-shrinking waterproof caulking compound.

CEMCOAT—Light reflecting enamel for interiors; also waterproof coating for exteriors and floors; is outstandingly superior for masonry surfaces.

CEMENT FILLER AND DUST-PROOFER—Double service plus decorative floors; a penetrating, tough, flexible floor coating of outstanding performance.

STORMTIGHT—Roof protection, a name that guarantees maximum roof protection at minimum cost.

FOUNDATION TO FLAGSTAFF—There is a suitable **SONNEBORN** product for every problem of surface conservation.

L. SONNEBORN SONS, INC. 88 Lexington Ave., New York City

Typical Spring Menus—Continued

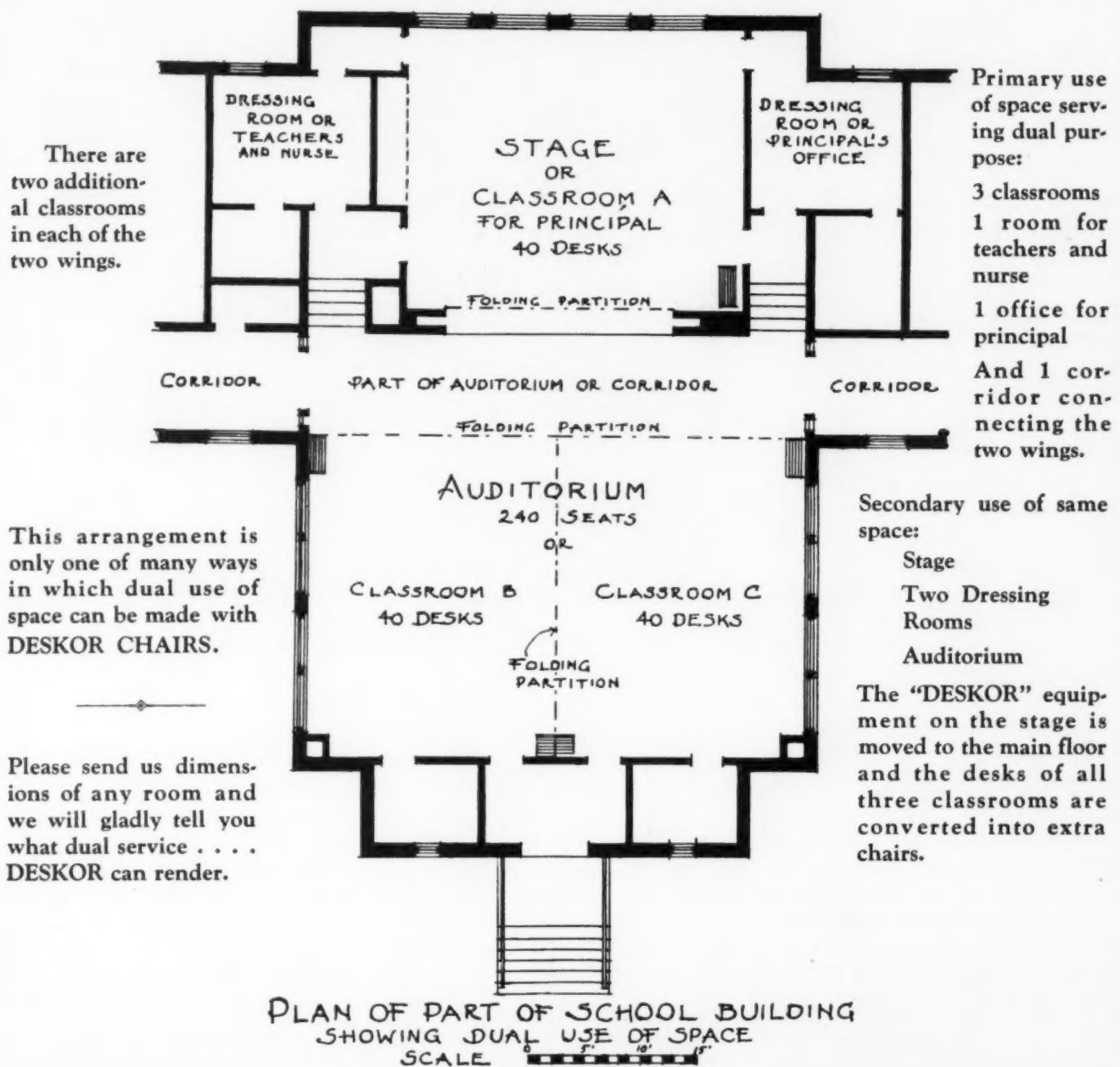
Day	Quantities for 25	Quantities for 100	Recipes
Wednesday			
Vegetable Chowder	Bacon— $\frac{1}{2}$ cup, diced Onions—2 Vegetables, cubed—8 cups Water—4 cups Milk—2 qts. Salt— $\frac{1}{2}$ tbsps. Pepper—1 tsp.	Bacon—2 cups, diced Onions—6 Vegetables, cubed—30 cups Water—16 cups Milk—8 qts. Salt—6 tbsps. Pepper—1 tbsps.	Vegetable Chowder Fry out bacon. Add sliced onion and cook until slightly brown. Add vegetables in any combination desired. Potatoes, carrots, turnips, celery and peas are good. Tomatoes may also be added. Add water and cook vegetables until tender. Watch carefully to prevent burning. Add scalded milk and season to taste with salt and pepper.
Radishes	Radishes—6 bunches	Radishes—24 bunches	Radishes To add interest cut into roses: cut off greens and cut down from top in petal form. Soak in ice water.
Prune Whole Wheat Muffins	Prunes, stoned—2 cups Prune juice—2 cups Butter—2 tbsps. Eggs—2 Sugar—2 cups Whole wheat flour—4 cups Soda—2 tps. Baking powder—1 tbsps. Salt— $\frac{1}{2}$ tsp.	Prunes, stoned—8 cups Prune juice—8 cups Butter—4 tbsps. Eggs—8 Sugar—8 cups Whole wheat flour—16 cups Soda— $2\frac{1}{2}$ tbsps. Baking powder—3 tbsps. Salt—2 tps.	Prune Whole Wheat Muffins Stone prunes into mixing bowl. Add warm prune juice to butter and add to stoned prunes. Add beaten eggs, sugar, then dry ingredients. Bake in greased muffin tins at 400° F. for twenty-five minutes.
Sliced Bananas and Milk	Bananas—2 doz. Milk—2 qts.	Bananas—8 doz. Milk—8 qts.	Sliced Bananas Slice bananas just before serving.
Thursday			
Corned Beef Hash	Cooked corned beef, chopped—8 cups Potatoes, cold, boiled—12 cups Salt—2 tbsps. Pepper—2 tps. Milk—to moisten Onion—1 medium	Cooked corned beef, chopped—8 qts. Potatoes, cold, boiled—12 qts. Salt— $\frac{1}{2}$ cup Pepper— $3\frac{1}{2}$ tbsps. Milk—to moisten Onions—2 medium	Corned Beef Hash Buy lean corned beef. Combine beef and potatoes. Season. Add chopped onion. Moisten with milk. Put in hot pan with a little fat spread evenly. Cook over low heat.
Escaloped Tomatoes	Tomatoes—1 No. 10 can Salt—1 tbsps. Fat— $\frac{1}{4}$ cup Pepper— $\frac{1}{4}$ tsp. Sugar—2 tbsps. Stale bread crumbs—1 pt. Onion, grated—2 tbsps.	Tomatoes—4 No. 10 cans Salt— $\frac{1}{4}$ cup Fat—1 cup Pepper—1 tsp. Sugar— $\frac{1}{2}$ cup Stale bread crumbs—2 qts. Onion, grated— $\frac{1}{2}$ cup	Escaloped Tomatoes Put the tomatoes, salt and onions into a buttered baking dish. Add the bread crumbs and butter. Bake until crumbs are brown.
Baked Indian Pudding With Raisins	Milk—4 qts. Cornmeal—1 cup Molasses or brown sugar— $1\frac{1}{2}$ cups Eggs—4 Salt—1 tbsps. Cinnamon—1 tsp. Ginger—2 tps. Seeded raisins—1 cup	Milk—16 qts. Cornmeal—4 cups Molasses or brown sugar— $5\frac{1}{2}$ cups Eggs—16 Salt— $\frac{1}{4}$ cup Cinnamon—1 tbsps. Ginger— $3\frac{1}{2}$ tbsps. Seeded raisins—1 qt.	Baked Indian Pudding With Raisins Cook the milk and cornmeal over hot water twenty minutes, stirring occasionally. Add beaten eggs, molasses, salt, ginger and raisins. Pour into a greased baking dish and bake slowly for two hours.
Friday			
Creamed Codfish	Codfish, salt—4 cups Milk—1 qt. Eggs—4 Butter— $\frac{1}{2}$ cup Flour— $\frac{1}{2}$ cup	Codfish, salt—4 qts. Milk—4 qts. Eggs—16 Butter—2 cups Flour—2 cups	Creamed Codfish Separate the fish into very small pieces and leave in cold water to cover for three hours, changing the water three times. Heat the milk in a double boiler; add the codfish, well drained, and cook for ten minutes. Mix the butter with the flour until a smooth paste is formed, then stir it into the milk, stirring until thickened. Cook ten minutes. Take the dish from the heat; add the beaten egg and stir well.
Raw Spinach Slaw	Cabbage, shredded— $2\frac{1}{2}$ qts. Raw spinach, chopped—4 qts. Carrots, grated—2 cups Vinegar— $\frac{3}{4}$ cup Salt— $1\frac{1}{2}$ tbsps. Salad oil— $\frac{1}{4}$ cup	Cabbage, shredded—7 qts. Raw spinach, chopped—6 qts. Carrots, grated—2 qts. Vinegar— $1\frac{3}{4}$ cup Salt— $\frac{1}{2}$ cup Salad oil—1 cup	Raw Spinach Slaw Soak prepared vegetables in cold water. Just before serving drain and add seasonings.
Gelatine With Fruit	Raspberry gelatine—13 oz. Water, hot—5 qts. Bananas—2 doz.	Raspberry gelatine—52 oz. Water, hot—20 qts. Bananas—4 doz.	Gelatine With Fruit Dissolve gelatine in hot water. When it begins to set add the sliced bananas.

The combination cost of these lunches is approximately 15c, or 5c per dish. These menus are to be supplemented by one-half pint milk for each child.

*These menus are selected from three weeks' menus prepared by the Nutrition Division, State Department of Health, Boston.

PLAN OF PART OF A Seven Room Elementary School Building (Bungalow Type) Nearing Completion.

Plan Shows How an Auditorium With Stage is Provided Without Increasing the Size of the Building by Making Dual Use of Space With
DESKOR CHAIRS



DESKOR CHAIRS are instantly changed by the pupils themselves from one use to the other. An entire room no matter how large is changed in less than one minute

DESKOR CHAIR SALES CORPORATION
PARK SQUARE BUILDING

("DESKOR" Registered in U. S. Patent Office)

BOSTON, MASSACHUSETTS

Food Fit for a Camper

By BESS OLIVER
HUDGINGS

THE summer camp is no longer considered a novelty or a luxury. It is practical. It is a source from which thousands of boys and girls each summer learn self-control and self-confidence, from which they store up many thrilling experiences as well as a vast reserve of health and happiness. It offers many adolescent children their first opportunity to enter group activities and teaches them to live with other people and to have an appreciation for the finer things of life.

Summer camps must have well-organized food service, and a number of school lunchroom managers act as camp dietitians during their summer vacations. It is not enough to say that their work is interesting; it is more, as anyone will attest who has experienced the eagerness, the excitement and the joy of cooking out of doors, of packing a picnic basket, or perhaps cooking bean hole beans in a ground oven or hiking miles to a lovely spot overlooking a huge valley and by the moonlight punching the fire under a big pot of ring tum diddy. The work is hard, but the efficient camp owner or director knows the importance of having a well-qualified dietitian and is glad to compensate her generously for her services.

The proper feeding of the children is one of the most important phases of camp life. Since parents send their children to camp to improve mentally and physically as well as to have a



One means of working up an appetite for camp meals.

good time, the camp must serve palatable, well-planned meals. The budget is usually made up to permit of generous but wise food expenditures and certain dishes which would not be served in school cafeterias because of cost are expected on the camp menu.

It is necessary for the dietitian to arrive several days prior to the opening of camp in order that she may take inventory of her equipment, make necessary replacements, confer with the business manager as to the number of early arrivals, secure price lists from different wholesale grocery concerns, check these quotations as to quality and prices and consider delivery accommodations. She must also visit bakeries, produce houses, farms and dairies, make arrangements

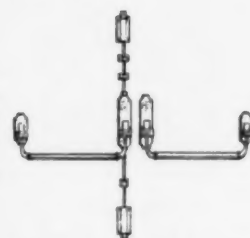
for ice deliveries and attend to many other details.

As in planning school lunches, it is wise to plan menus at least a week in advance and to post them in the kitchen a day in advance. By attending counselor meetings, the dietitian is advised of the week's activities and can proceed accordingly. She knows how many overnight trips there are to be with supper and breakfast out of camp and how many parties for which refreshments are necessary. And she picks up helpful ideas.

Most camps are supplied by local farms with plenty of good milk, an abundance of fresh fruits, fresh vegetables, eggs and chickens. Frequently, fresh fish is available from near-by waters. It is not usually advisable to contract for these items in advance.

SCHOOL COAL COSTS DOWN ONE-FIFTH

Board Reports Subs
of Doors Aff



Makes Safe Exit Sure

Von Duprin Self-Releasing Fire and Panic Exit Devices provide the safest, surest means of exit known. Made of drop-forgings, these devices are positive, instantaneous in action—and outlast the building on which they are placed.

SCHOOLS GET BIG FUEL SAVING WITH

Von Duprin

Thresholds and Compensating Astragals

Big money savers on the doors of public buildings are the two devices shown above. They positively prevent the leaks that so often waste alarming amounts of fuel in cold weather.

On the floor is the Von Duprin Threshold, made of extruded bronze to outwear the generations of feet that slide over it, and so designed that it keeps out drafts, bars the way to the heaviest rain, and keeps doors fitting trim and snug at the bottom.

At the forward edge of the right-hand door is the Von Duprin Compensating Astragal device, the simple result of a stroke of genius. Instantly adjusted by anyone who can use a wrench, it makes easy the keeping of the meeting edges of double doors in perfect alignment, regardless of the shrinking, swelling or warping of the doors.

The two devices make available enormous fuel savings—and take no small load of worry from the shoulders of the superintendent.

Sweet's Index $\frac{18}{42}$

Complete literature and specification data is yours on request.

VONNEGUT HARDWARE CO.

INDIANAPOLIS, IND. • Von Duprin Latches are listed as standard by Underwriters Laboratories, Inc.

Since the food should be good, simple and abundant, the menus are planned with milk topping the list, allowing a quart a day per camper (this includes milk used in cooking). At camp it is a joy to see children drink milk and love it. The children are weighed once a week and those found to be underweight are given extra allowances of milk.

There are numerous milk dishes that may be included in the week's menus: hot cocoa for cool mornings, cream of vegetable soups, stews, escalloped dishes, creamed vegetables, cakes, cookies, milk puddings and the always popular custards. In case the supply of milk does not quite meet the needs of camp, evaporated or powdered milk may be used and cream conserved by topping desserts with marshmallows. Milk is the most important single item in the dietary and should be supplemented with the other protective foods, which are fresh vegetables, fresh fruits, cheese, eggs and liver.

Two or more fresh green vegetables, besides potatoes, should be served daily. There are times when it is necessary to simplify the labor situation by using canned vegetables, but these may be secured in fine variety.

There should be one serving of meat a day, such as beef, liver, chicken or fish. It is well to include fish on Fridays. Fried and greasy foods should be avoided.

Fruit for the camp is available in great variety. There are blueberries, raspberries and blackberries. All are excellent with cereal in the morning, or with cream or top milk as a supper dessert, or with shortcake at noon. There are also large black and red cherries and delicious melons, frequently home-grown. At the produce market the dietitian usually can secure bananas, oranges, lemons and grapefruit. Stewed raisins and prunes are palatable for breakfast.

Whole wheat, cracked wheat, white, brown and rye breads may be served, plain or toasted, and hot breads occasionally. Crisp strips of bacon, and the important item of at least 2 ounces of butter per child per day

contribute with the foregoing foods to form the basic daily diet, yielding the requirements of the adolescent.

The dietitian should be able to meet any emergency, keeping her pantry well filled. She should be ready at all times to cooperate with the business manager, as she is daily given a list of new arrivals and departures. She should consider the employees and their equipment and not expect them to accomplish the unreasonable. Experienced cooks, brought to camp by the dietitian, may be supplemented with local help.

The following menus are typical of those served in a Southern camp:

SUNDAY

Breakfast

Hot cereal with top milk
Fried apples Bacon strips
Toast Milk, coffee

Dinner

Fried chicken
Mashed potatoes with gravy
Boiled corn on cob
Creamed peas Buttered rolls
Ice cream with chocolate sauce

Supper

Lemonade Macaroni and cheese
Sliced tomatoes with mayonnaise
Bananas with cream Cake

MONDAY

Breakfast

Hot cereal with raspberries and cream
Scrambled eggs Toast, jelly
Milk, coffee

Dinner

Veal steaks Rice with gravy
Spinach with hard boiled eggs
Combination vegetable salad
Cornbread sticks
Gelatine dessert with whipped cream

Supper

Baked ham Potato salad and onions
Sliced pineapple
Bread, butter, milk

TUESDAY

Breakfast

Tomato juice
Cold cereal with stewed raisins
Omelet Toast with jelly
Milk, coffee

Dinner

Liver and onions Potatoes au gratin
Fresh string beans
Whole wheat bread and butter
Fresh blackberry pie with cream

Supper

Spanish rice
Carrot, cabbage, pineapple and
raisin salad

Gingerbread with whipped cream
Rolls, butter, milk

WEDNESDAY

Breakfast

Cherries Hot cereal
Cinnamon toast Bacon
Milk, coffee

Dinner

Chicken and dumplings
Fresh butter beans Stuffed tomato salad
Baked potatoes
Whole wheat rolls and butter
Pineapple sherbet with cookies

Supper

Frankfurters with sauerkraut
Sliced tomatoes with cottage cheese salad
Cottage pudding Milk

THURSDAY

Breakfast

Hot cereal with top milk
Chipped beef with scrambled eggs
Hot biscuits with raspberry jelly
Milk, coffee

Dinner

(All-day float trip on river)
Ham sandwiches
Cheese and pimiento sandwiches
Pickles and potato chips Oranges, apples
Raw carrots, onions, break and
mayonnaise Cakes

Supper

Baked hash Slaw
Blackberries and cream
Bread, butter, milk

FRIDAY

Breakfast

Cantaloupe Cold cereal with top milk
French toast Milk, coffee

Dinner

Salmon croquettes Buttered peas
Escalloped potatoes Pickled beets
Whole wheat rolls
Fresh peach cobbler with cream

Supper

Scrambled brains and eggs
Fried mush Lettuce and onion salad
Raspberries with cream Cookies

SATURDAY

Breakfast

Oranges Cold cereal with top milk
Bacon Hot biscuits with honey
Milk, coffee

Dinner

Peppers stuffed with ham and rice
Fresh string beans Buttered carrots
Breaded tomatoes
Cornbread muffins Cherry pie

Supper (Picnic)

Raw vegetable salad
Baked pork and beans Deviled eggs
Bread and butter sandwiches
Apples, doughnuts

In Sāhārā



In this air-conditioned school, teachers and students alike wrap up to keep cool.

Royal

"THE FINEST SINCE '97"

Write for catalog of

MODERN SCHOOL SEATING
for
MODERN AMERICAN SCHOOLS

ROYAL METAL MFG. CO., 1132 So. Michigan Ave., CHICAGO — Also New York and Los Angeles

BETTER PLANT PRACTICES • • •

Insurance Costs Are Major Problem

A reserve fund for fire insurance, if the school system is sufficiently large, is recommended by W. A. Pillans, business manager, board of education, Lorain, Ohio, or next to that state insurance, if, he adds, "I can be convinced it will actually save us money. Ours is now all commercial.

"Like most school people, we are of the opinion that fire insurance rates are too high—out of proportion to the actual losses sustained. We do not have an insurance reserve. We have fifteen schools.

"Our fireproof buildings are insured on the average rate, blanket form 50 per cent co-insurance; nonfireproof buildings at 80 per cent co-insurance. Our yearly premiums are hardly sufficient to use as the start for a reserve fund and we have never been able to set aside from our operating fund an amount large enough for protection.

"We enjoy a rather low rate considering the fact that we have nine non-fireproof buildings. Our present rate is 0.453 for a three-year period and we expect a 25 per cent reduction on our fireproof buildings when we have them raterated this spring.

"Our insurance is limited to stock companies which have at least \$1,000,000 capital and who rate A or better in Best's Insurance Guide. We divide our business between all local agencies who major in the insurance business and attempt to keep the shares as nearly equal as possible. We carry a small amount of tornado insurance, \$100,000, which should be greatly increased by including this protection as a part of our fire insurance policies."

Start Right in Care of Terrazzo Floors

The sheen of old terrazzo floors is not an artificial gloss but is produced by proper care and age. Adherence to certain simple rules will make the new terrazzo floor cure up hard and smooth, acquiring the true color of paint pigments and marbles contained therein, and provide a beautiful gloss which will be lasting, yet not slippery. When properly completed such a floor is left to a hone finish; it will be from six to twelve weeks before a sheen is noticeable.

It is advisable to mop up these floors and base every night when new, using a neutral soap that develops rich suds. This soap should not contain alkali, acid or other caustic substances. Any of the standard pure soft washing soaps will serve satisfactorily.

Some of these soaps are marketed as flakes, and in this form are more readily dissolved in water. Harmless liquid soaps, too, can be used to advantage. If feasible allow the suds to remain eight, twelve or even twenty-four hours.

Once or twice each week the floor should be scrubbed, preferably with a scrubbing machine. The same type of soap suds or liquid soaps can be used, in addition to which the floor should be sprinkled with soap powder containing volcanic ash, pumice or other abrasive element. This should be applied to the floor instead of being dumped into the scrub bucket, for the abrasive grit will settle on the bottom of the bucket and thus be wasted.

Care Required in Cleaning Slate Blackboards

Blackboards in schoolhouses should be maintained by employees on the janitorial staff who are especially trained to perform this important duty, according to Conrad Pykoski, operating mechanical engineer, board of education, Minneapolis, in writing on the subject of slate blackboards, their care and maintenance in public schools.

"In many school systems," states Mr. Pykoski, the pupils do the cleaning of the blackboards. They are furnished with a small pail of water and a sponge and proceed as follows: The sponge is soaked in the water and applied to the slate blackboard. The water, chalk dust and other dirt on the slate at once form a mud. This mud the pupil spreads over the board and immediately a film is formed over the entire surface. Besides, the wall under the blackboard may be damaged and the floor is soiled with the dirty water from the sponge.

"After this mud dries on the blackboard, it cannot be removed by washing. If the pupils were taught how to clean the blackboards properly, using a very small amount of water, completely removing the mud and dirt and not allowing them to dry on the slate, no damage would be done, as water of itself does not injure slate.

"In the majority of cases in which the boards are cleaned by pupils, the chalk rails are also cleaned by them. A pupil usually places a wet sponge at one end of the chalk rail and pushes it to the other end. Through constant repetition of this process, the finish or paint is removed from the rail and is replaced by a resistant coating of white-wash.

"There appears to be a trend toward the dry cleaning of slate blackboards. This is done by spraying a piece of cloth with kerosene, winding it around a strip of wood and using this as a sort of squeegee. The outcome of this practice is merely the converting of the chalk dust, dirt and kerosene into a paste instead of into mud.

"This paste, being forced into the pores, causes the board to become slippery and to lose its efficiency. Boards that have been so handled are hard to clean properly, because the oil prevents the water from acting on the paste.

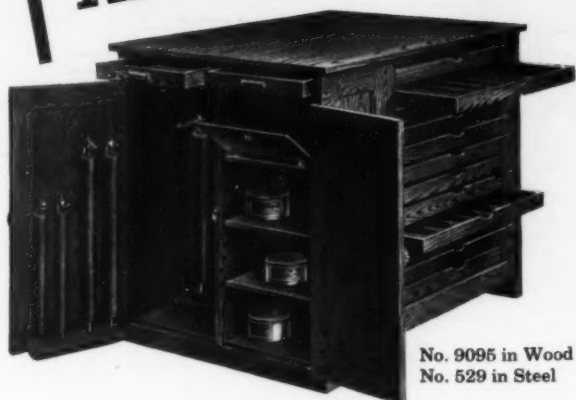
"Treated chamois skins for cleaning blackboards have recently appeared on the market. The majority of these have been treated with an oil that produces an action similar to that of kerosene. Dry chamois skins may be used with satisfactory results. If it were not for the high cost of the chamois skins, this process could be recommended. However, the chamois has a short life on the average rough blackboard. The use of a wet chamois does not give sufficiently satisfactory results to warrant its use as a method of cleaning school blackboards.

"Still another method of cleaning blackboards comprises the use of clear water and a squeegee. This method has not proved to be satisfactory as it makes a muss on the floor and walls and takes considerably more time to clean up after the job is performed than it takes to do the job with a sponge and water."

AN INVITATION

Every official responsible for the management of school property who believes he can benefit from the experience of others is invited to participate in an interchange of ideas. The Editors invite correspondence to establish this page as a clearing house of practical plant suggestions.

THE
3 in ONE
AMERICAN



No. 9095 in Wood
No. 529 in Steel

SCHOOL PRESSROOM CABINET

Stock table, drying rack, ink and roller cabinet all combined into one. The American School Pressroom Cabinet economizes on space providing for efficiency and convenience.

The 30x30x1½ inch drying frames can be pulled from either side of the cabinet, enabling the feeder to work at one side, placing freshly printed sheets, while the dry sheets may be removed from the other side.

The roller compartment provides ample space for storage of rollers any length up to 31 inches.

One of the shallow drawers at the top contains a removable black-enameled metal pan and plate-glass ink mixing slab. The other drawer is convenient for tools.

Two metal-lined rag compartments round out this compact cabinet which stands 40 inches high. The stock table top measures 33¼x50½ inches.

In ordering specify either No. 9095 made of hard wood with flat varnish finish, or No. 529 (same design) made of steel in an olive green finish. Or, if you prefer, write for additional information.

DEPARTMENT OF EDUCATION

American Type Founders

200 ELMORA AVENUE

ELIZABETH, N. J.

Types used: Stymie Bold and Century Schoolbook

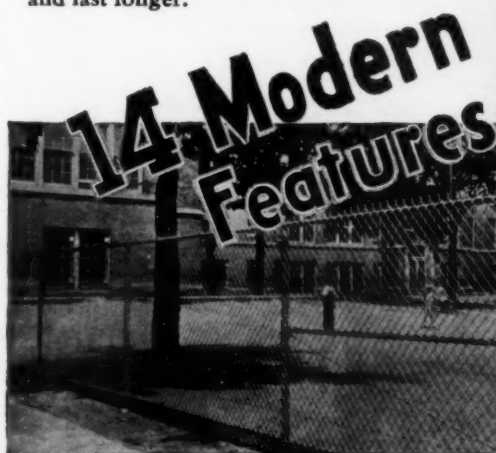
THE
BOARD DECIDED
The Most Modern
FENCE WAS THE
Best Buy!



Let any board study Continental fence feature . . . let them inquire about the serviceability and appearance of old installations . . . let them put Continental Chain-Link fabric

through any laboratory tests . . . let the man with the sharpest pencil figure the cost . . . Continental Chain-Link fence is made to sell in competition with any or all other makes.

Continental is the most modern fence and embodies many new features both metallurgical and structural that add to its quality and dependability. Special-analysis copper-bearing steel—wire heat-treated for tensile strength and resilience—heavy coating of hot-dipped zinc—and many other modern features make Continental Chain-Link fence serve better and last longer.



14 Modern Features

MAIL THIS COUPON...TODAY

CONTINENTAL STEEL CORP., General Offices, Kokomo, Indiana.
(Plants at Canton, Kokomo, Indianapolis)

Tell us without obligation, more about your complete line of Chain-Link fence and erection service.

Name.....

Address.....

CONTINENTAL Chain-Link FENCE

NEWS IN REVIEW

New York State Starts School Building Survey

A committee known as the Educational Buildings Study has been established by the New York State Board of Regents to investigate the character and cost of public education buildings in New York State. Luther Gulick is director and Barnett Braslow, architect of New York City, committee head.

This inquiry has no connection, it is emphasized, with state aid to schools but is based on the premise that a study of school buildings throughout the state would be productive of information and facts to enable the state education department to arrive at some sort of general plan for uniformity in construction. It is expected that a couple of years will be required before the study is completed and a final report ready with recommendations.

Associated with Mr. Braslow are Ralph Evans Hacker, architect, Fort Lee, N. J., Robert W. Clark, engineer, Windsor, Conn., and Hubert W. Stone, cost accountant, Harrison, N. Y.

Teacher Security Is League College Theme

The eleventh session of League College, sponsored annually by the National League of Teachers Associations, will be held July 6 to 17 at Reed College, Portland, Ore. Teacher security with emphasis on teacher health is the theme.

Dr. Ivan A. Booker from the staff of the National Education Association will direct the work, which leads to two semester hours of transferable credit.

Lectures and conferences will be conducted by a number of prominent educators. An enrollment fee of \$35 covers instruction, board and room. For further information, persons are asked to write Edward O. Sisson of Reed College.

Receives Records and Phonograph

A college music set of approximately 900 records, an electric phonograph, a record cabinet, special bound scores and other equipment has been given to the University of Kentucky by the Carnegie Corporation. The records will be kept in a room set aside for the use of students who may at any time hear those in which they are interested played by an attendant.

Summer Courses in Sight-Saving

Courses for the training of teachers and supervisors of sight-saving classes to be offered at 1936 summer sessions have been announced by the National Society for the Prevention of Blindness. They will be held at the University of Cincinnati; the University of California, Los Angeles; State Normal School, Oswego, N. Y., and Teachers College, Columbia University.

Report Shows Salaries Climbing

Salaries will be restored in full or raised above predepression levels this year in forty-seven cities out of 182 that were surveyed by the educational research service of the Department of Superintendence. The highest proportion is found in the North Atlantic States where thirty-three of the forty-seven cities are located. Salaries will be partially restored in 110 cities, while twenty-five cities will make no restorations of cuts. This last number includes eleven cities in which all percentage cuts are still in effect but in which annual increments have been paid regularly, and five cities in which new basic schedules have been adopted.

Catholic Educators Demand School Freedom

Political domination of education and the dangers of increased federal control over the school system of the United States were discussed at the thirty-third annual convention of the National Catholic Educational Association held in New York City. A resolution passed by approximately 2,000 Catholic educators present was introduced by the Rev. George Johnson, secretary-general of the association. Oaths of allegiance also were opposed as a dangerous step.

At the closing business session, the Most Rev. John B. Peterson, Bishop of Manchester, N. H., was elected president general and the Right Rev. John R. Bonner, of Philadelphia, was named treasurer general. The following vice presidents were elected:

The Very Rev. Monsignor Joseph V. McClancy, of Brooklyn; the Very Rev. John B. Furay, S.J., of Mundelein, Ill.; the Very Rev. James A. Burns, C.S.C., of Notre Dame University; the Rev. Paul Campbell, of Pittsburgh, and Brother Philip, F.S.C., of Baltimore.

Custodians and Engineers Plan Annual Conference

A record attendance is expected for the 1936 convention of the National Association of Engineers and Custodians to be held in Evansville, Ind., June 15 to 20. In addition to the regular business sessions a four-day intensive training program in custodian-engineering work is being sponsored which will precede the convention sessions.

The educational program will begin Monday, June 15, and will continue through June 18. Conference sessions will be held on June 19 and 20.

The training work to be covered comes under four heads: (1) care and operation of service systems, including heating, ventilating, fire protection, lighting and electrical service; (2) care, treatment and cleaning of all types of floors and furniture; (3) cleaning and maintenance of windows, bulletin boards, blackboards and toilets, and (4) the relationships and the personal aspects of the work of custodians, including the relation to pupils, teachers, parents and community; personal appearance, character and habits, and the planning and managing of a custodian's work.

Given Grant to Complete Study

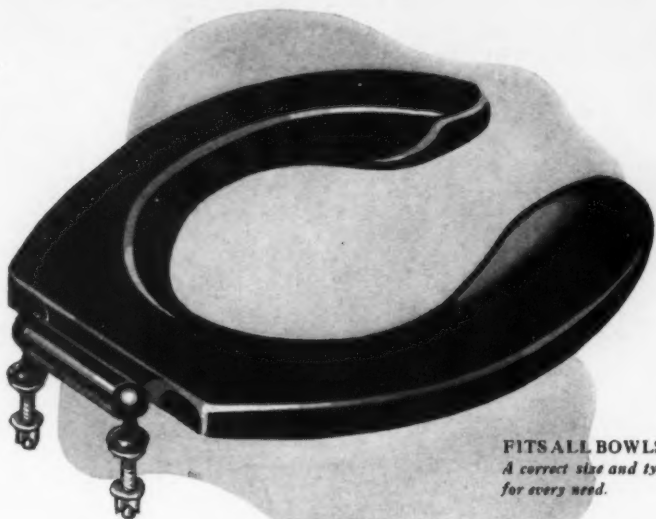
A grant of \$116,000 has been received by the Committee for the Cooperative Study of Secondary School Standards. Made by an educational foundation, it is to be used to complete the study of secondary school standards and accrediting procedures which the committee has been making. The New England, the Middle States, the North Central, the Southern, the Northwest and the Western associations of colleges and secondary schools are represented among the twenty-one members composing the committee.

\$50,000 Gift for Harvard

Harvard University has received \$50,000 for the establishment of national scholarships under its 300th anniversary plan from Mrs. George Chase Christian, Minneapolis. The scholarships are to be known as the George Chase Christian Memorial Scholarships, in honor of her husband, and are to be awarded to residents of Minnesota, preferably for graduate work.

New Orleans Is Chosen

The Department of Superintendence of the National Education Association will hold its annual meeting in New Orleans, Feb. 20 to 25, 1937.



FITS ALL BOWLS:
A correct size and type
for every need.

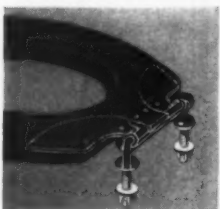
End Maintenance Cost with **CHURCH** *Sani-Black* SEATS

● This summer, end maintenance and upkeep on toilet seats forever. Replace stained or shabby seats with CHURCH Sani-Black SEATS. The first cost of a CHURCH Sani-Black SEAT is the last cost. It outlasts the building in which it is installed.

The hardwood core and thick, smooth, hard rubber surface are molded into one unbreakable unit by 108 tons of pressure. Steel plates molded in the seat during the same operation make it impossible for hinges ever to loosen. Hinge posts are hard rubber over brass: there is no exposed metal to corrode or tarnish.



EASILY INSTALLED: unscrew bolts that hold old seat ... put new Church Seat on ... refasten bolts.



UNBREAKABLE HINGE: steel hinge plates, molded integrally, impossible to loosen.

CHURCH Sani-Black SEATS are standard equipment with the Boards of Education in many leading cities. They are indestructible—impervious to acids, time or physical abuse. The hard rubber surface—smooth, lustrous and everlasting—will not crack, chip or wear off. It is absolutely hygienic and can be kept sanitary with soap and water. A free sample cross-section will give you proof of their strength and durability. Write for it today, and for the catalogue showing CHURCH SEATS for Schools. C. F. CHURCH MFG. CO. • HOLYOKE, MASS., Division of American Radiator & Standard Sanitary Corporation.

CHURCH *Sani* SEATS

**BEFORE LOCKING UP FOR THE SUMMER
CHECK 3 ITEMS! ARRANGE FOR**

additional

1. LYON LOCKERS

This is also a good time to add that extra locker capacity which many schools have needed for several years. During the past season the new Lyon Locker was announced. A dozen structural improvements maintain Lyon leadership in this field. Available in every type for corridor, gym and group-controlled installation. There is no better time than now to standardize on Lyon Lockers for all future requirements. Write for latest catalog No. 233.



2. LYON CABINETS

Inadequate shelving and storage equipment facilities can be replaced during the summer by new efficient Lyon units. Select from the most complete line. Instruct the engineering and maintenance staff to include the new shelving and cabinets with summer repairs. Illustration shows typical Lyon Storage Cabinet. Send for description of many styles. Catalog No. 421.



cabinets with summer repairs. Illustration shows typical Lyon Storage Cabinet. Send for description of many styles. Catalog No. 421.

3. LYON Steel Folding CHAIRS

Summer routine should include a complete inspection of all portable seating equipment—and replacement of "doubtful" units with Lyon Steel Folding Chairs. Noted for safety and long life without sacrifice of comfort. Four styles including straight or curved seats, with and without arms. Write for chair bulletin No. 835.



Send the Coupon

LYON METAL PRODUCTS, INCORPORATED
2606 River Street, Aurora, Illinois

☐ Please send Locker Catalog No. 233. ☐ Cabinet Catalog No. 421.
☐ Chair Bulletin No. 835. ☐ Have a representative call.

Name..... School.....

Address..... City..... State.....

LYON *Service*

SCHOOL EQUIPMENT

LYON METAL PRODUCTS, INCORPORATED

PRIVATE SCHOOLS

Private School Under

Construction at Miami

Leo Huberman, a graduate of Harvard in 1929, and identified with New York and Boston private schools since that time, together with Ida Huberman, who has been associated with private schools in and near St. Louis, is building a school at Miami, Fla., on Normandy Isle.

Construction and fixtures are expected to cost about \$40,000, and in addition to the main building with its social hall and dormitories, the school will be equipped with a basketball court, badminton courts, hand ball courts and complete playground apparatus. Enrollment in the school will include the privileges of the Deauville Cabana Club.

Courses offered will be academic, arts and crafts. The Hubermans are experienced in camp activities and the school will specialize in outdoor formations.

New Hockey Rink at Storm King

A new hockey rink is to be built north of the Tower House at the Storm King School, Cornwall-on-Hudson, N. Y. The rink, 20 feet longer and 10 feet wider than the present one, is to be extremely shallow and surfaced with a water resistant material. In this way the rink may be drained quickly in the spring and used for tennis courts. A locker and shower room is to be added to the lower part of Tower House for the use of boys active on the rink and courts.

Kemper Announces Scholarships

Four junior college scholarships, each amounting to \$400, have been announced by Kemper Military School, Boonville, Mo. These scholarships are to be awarded at large, and qualifications to be met include an acceptable scholastic record, good health, excellent character, leadership in extracurricular activities, recommendation from high school principal and membership in the June graduating class. The scholarships will be extendible for a second year.

M. A. Cheek to Head Park School

Marion Adolphus Cheek, a member of the faculty at the Rivers School, Brookline, Mass., has been elected headmaster of the Park School of Buffalo, Buffalo, N. Y., effective July 1.

Westminster Head Resigns

Raymond Richards McOrmond, headmaster of Westminster School, Simsbury, Conn., for the last thirteen years, has announced his resignation to take effect June 30. Mr. McOrmond, before coming to Westminster in 1923, was for fourteen years a master at the Choate School, Wallingford, Conn., where he was head of the mathematics department, director of music and head football coach. With the Rev. Frederick H. Sill of Kent School, Kent, Conn., he originated "Fathers' Day," which has been widely adopted among preparatory schools. Westminster School was founded in 1888 by William Lee Cushing and was moved to Simsbury about 1900.

Oakwood to Enlarge Dining Hall

Plans are under way for the construction of an addition to the dining hall at Oakwood School, Poughkeepsie, N. Y. The dining hall is a part of the original farmhouse on the property, and had been enlarged on a previous occasion.

Davis Is New Head at Evans

Harrison M. Davis, Jr., at present assistant in colonial American history under Prof. Samuel E. Morison at Harvard University, and in 1934-1935, head of the department of English at Evans School, Tucson, Ariz., has been appointed headmaster of Evans School to succeed Frederic Evans Camp. Mr. Davis has served as assistant head counselor at Camp Winona, Denmark, Me.

Assistant Head for Gilbert

Henry S. Moseley, principal of the high school at Shelton, Conn., has been appointed assistant principal of the Gilbert School, Winsted, Conn. The board of trustees of Gilbert decided to relieve Principal Walter D. Hood of some of the increased work that has been his owing to the large enrollment.

Edna F. Lake on Committee

Edna F. Lake, principal of Laurel School, Cleveland, has been appointed to the national committee on the interchange of teachers sponsored by the American Association of University Women and the Eastern Headmistresses' Association. Miss Lake was headmistress of the Albany Academy for Girls, Albany, N. Y., before she came to Laurel.

Coming Meetings

June 3-4—Indiana County Superintendents' Association, Indianapolis.
June 11-13—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.
June 15-20—National Association of Engineers and Custodians, Evansville, Ind.
June 16-18—Conference on Child Development and Parent Education, University of Iowa.
June 22-25—National Conference of Visual Education and Film Exhibition, Chicago.
June 25-26—Conference on Business Education, Chicago.
June 28-July 2—National Education Association, Portland, Ore.
July 6-11—Conference on Curriculum and Guidance, Stanford University.
July 6-17—Department of Elementary School Principals, National Education Association, Portland, Ore.
July 6-9—American Home Economics Association, Seattle, Wash.
July 28-30—Superintendents' Conference, Pennsylvania State College.
Sept. 27-29—Council of School Superintendents, Saranac Inn, N. Y.
Oct. 7-9—New Hampshire State Teachers Association, Littleton.
Oct. 8-10—Vermont State Teachers Association, Burlington.
Oct. 12-16—National Association of Public School Business Officials, St. Louis.
Oct. 15-17—Wyoming Education Association, Laramie.
Oct. 22-24—Rhode Island Institute of Instruction, Providence.
Oct. 22-23—Indiana State Teachers' Association, Indianapolis.
Oct. 22-24—Mississippi Education Association, Jackson.

Oct. 23-24—Maryland State Teachers' Association, Baltimore.
Oct. 29-30—Maine Teachers' Association, Lewiston.
Oct. 29-31—Montana Education Association, simultaneous meetings at Helena, Kalispell, Great Falls and Billings.
Oct. 29-31—Utah Education Association, Salt Lake City.
Oct. 30—Connecticut State Teachers Association, Hartford.
Nov. 4-6—North Dakota Education Association, Grand Forks.
Nov. 5-7—Colorado Education Association, simultaneous meetings at Denver, Pueblo and Grand Junction.
Nov. 5-7—Iowa State Teachers Association, Des Moines.
Nov. 5-7—Minnesota Education Association, St. Paul.
Nov. 6-7—Kansas State Teachers Association, simultaneous meetings at Topeka, Salina, Hays, Garden City, Hutchinson, Winfield, Coffeyville and Fort Scott.
Nov. 9, week of—Delaware State Education Association, Wilmington.
Nov. 11-14—Missouri State Teachers Association, Kansas City.
Nov. 12-14—Arizona State Education Association, Tucson.
Nov. 12-14—West Virginia State Education Association, Huntington.
Nov. 13-16—New Jersey State Teachers' Association, Atlantic City.
Nov. 22-25—South Dakota Education Association, Rapid City.
Nov. 26-28—Texas State Teachers Association, Fort Worth.
Dec. 10-12—National Conference on Educational Broadcasting, Washington, D. C.
Dec. 28-30—Pennsylvania State Teachers Association, Harrisburg.

Educators everywhere realize heating and ventilating is more important in schoolrooms than in any other type of building. That is why Nesbitt Syncretizers, the time-proved, scientifically correct classroom heating and ventilating units, are being specified for new schools and school remodeling all over the country. Backed by years of experience, proved by day in and day out service in thousands of school installations, Nesbitt Syncretizers are the one safe, economical and practical method for all school applications. In thinking of heating and ventilating for your new school or for remodeling your present system, phone our nearest branch office and let us give you the complete story of the unusual advantages and economies offered by Nesbitt units. There is no obligation or charge. Phone or write today.

AMERICAN BLOWER CORPORATION
6000 RUSSELL STREET • DETROIT, MICHIGAN
BRANCH OFFICES IN ALL PRINCIPAL CITIES

**BUILT IN THE
RESEARCH LABORATORY**

**TESTED IN
ACTUAL SCHOOL OPERATION**

NESBITT SYNCRETIZER

FOR CLASSROOM
HEATING AND
VENTILATING

Sold by
**AMERICAN BLOWER
CORPORATION**

Installed in schools like the Pierre S.
du Pont School, Wilmington, Delaware

AMERICAN BLOWER CORPORATION

Division of American Radiator & Standard Sanitary Corporation

Twelve Films to Complete Physical Science Series

Twelve films that will complete a series based on the general physical science course at the University of Chicago are now under production by Erpi Picture Consultants, Inc. These will complete the picture groups on physics and chemistry and add to astronomy.

Temporarily some of the film titles are: "The Earth," "The Solar System," "The Moon and Eclipses," "Celestial and Terrestrial Mechanics," "The Galaxy," "Velocity of Chemical Reactions," "Colloids," "Carbon and Its Compounds" and "Electricity and Matter."

Advisory Committee for Film Library Appointed

An advisory committee has been appointed by the Museum of Modern Art, New York City, to meet once a month to discuss the activities and future plans of the Film Library with the trustees of the museum. Among the members of the committee are Will H. Hays, president of the Motion Picture Producers and Distributors of America, chairman; Dr. Irwin Panofsky, professor of fine arts at the institute for advanced study, Princeton; David H. Stevens, director for the Humanities of the Rockefeller Foundation, and Irving Thalberg, producing executive, Metro-Goldwyn-Mayer.

The purpose of the library is to assemble, catalogue, preserve and circulate as complete a record as possible in the actual films themselves of all types of motion pictures from 1893. Officials of the Film Library are to go abroad within a month or two to assemble noteworthy European films to be placed on the Film Library programs for next year.

Film Demonstrates Laws of International Trade

"Commerce Around the Coffee Cup" is a film made by Pathe News, Inc., for the U. S. Department of Commerce, based on a story by Howard S. Welch, chief of the automotive-aeronautics division of the Bureau of Foreign and Domestic Commerce. The film features Lowell Thomas, well known commentator, and the romance of foreign trade.

Animated drawings are used to depict the exchange of goods between countries and to explain how payment for these goods is made. The film shows how international books are kept, explaining the items that make up the balance of international payments and describing triangular trade.

Course on Visual Education Aids

A course in visual education, including a study of such aids as excursions, experiments, charts, maps, models, graphs, flat pictures, bulletin boards, blackboards, stereographs, motion pictures, film slides, opaque materials, and home-made and commercial glass slides, is being offered this summer at Winona State Teachers College, Winona, Minn.

Reproductions of Works of Art

A list of "Sources for Reproductions of Works of Art," edited by Etheldred Abbot, librarian of the Ryerson and Burnham Libraries, Art Institute, Chicago, has been compiled by the visual methods committee of the American Library Association and published as Part II of the April, 1936, A. L. A. Bulletin. It may be obtained separately from the Ryerson Library, Art Institute, Chicago or from the American Library Association, 520 North Michigan Avenue, Chicago. The price is five cents.

Speakers Are Scheduled for National Conference

Educational sound films and sound educational arguments for their use in the schools will feature the annual National Conference on Visual Education and Film Exhibition to be held in Chicago, June 22 to 25. Among the speakers on the tentative program released by H. A. DeVry are the following: Amelia Meissner, curator of the St. Louis Public School Museum, and her assistant, Miss W. Gotterman; H. L. Kooser, in charge of visual instructor service, Iowa State College; Rupert Peters, director, department of visual education, public schools of Kansas City, Mo.; W. J. Hamilton, superintendent of schools, Oak Park, Ill.; J. A. Hollinger, department of science, Pittsburgh public schools; Miss J. M. Carter, University of Chicago Press; Dr. I. E. Deer, Motion Picture Producers and Distributors of America; H. S. Jones and A. H. Jones, Gary, Ind., and Albert H. Goodrich, assistant principal, Amundsen High School, Chicago.

Films for the School Screen

X—Norway, Sweden and Denmark

Fighting for a Living in Norway—Industries of Norway: the herring catch; lumbering; logging; gathering eggs from "bird-rocks" and collecting down; reindeers; coal industry; famous sled dogs. 1 reel. 16 and 35 mm., silent and sound. For rent or purchase. International Educational Pictures, Inc., 40 Mt. Vernon Street, Boston.

Norway—Beauty spots, life and customs. 1 reel. 16 mm., silent. For rent or purchase. Bell and Howell company, 1801 Larchmont Avenue, Chicago.

The Land of the Vikings—Through the fjords and rocky fields of Norway where, according to the legend, Firthjof, Viking demigod, was born and lived. 1 reel. 35 mm., sound. For rent or purchase. International Educational Pictures, Inc., 40 Mt. Vernon Street, Boston.

Top of the World—Norway—Land of the midnight sun. 1 reel. 16 mm., sound. For rent or purchase. Walter O. Gutlohn, 35 West 45th Street, New York City.

Sweden—Iron mines, hydro-electric plants and native Lapps, all located north of the Arctic Circle; lumber industry; native costumes and customs in rural districts. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Co., 343 State Street, Rochester, N. Y.

Sunny Sweden—Scandinavian scenery and customs of the people. 1 reel. For rent or purchase. 16 mm., silent, from Mogull Brothers, 1944 Boston Road, New York City; 16 mm., sound, from Edited Pictures System, Inc., 330 West 42d Street, New York City.

Sweden—Land of Tomorrow—Varm-land, Skana, Swedish Lapland; industries and native life of Delacardia. 3 reels. 16 mm., silent. Transportation charges only. Advertising Department, Cunard White Star Line, 25 Broadway, New York City.

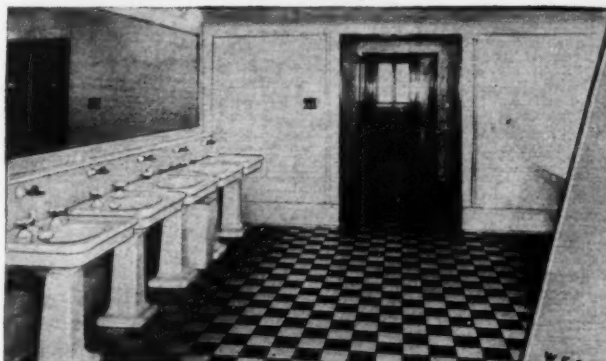
Gota Canal—Waterways connecting Stockholm and Gothenburg; views of Stockholm. 1 reel. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Denmark—Agricultural and industrial methods by which Denmark, in overcoming methods of poor soil and lack of raw materials, has made itself an important country. 1 reel. 16 mm., silent. For rent or purchase. Teaching Films Division, Eastman Kodak Company, 343 State Street, Rochester, N. Y.

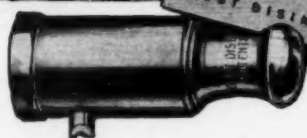
Beautiful Denmark—Copenhagen, Trivoli, Fredericksborg Castle, Royal Castle, Bornholm and other scenes in Denmark. 4 reels. 35 mm., silent. For rent or purchase. International Educational Pictures, Inc., 40 Mt. Vernon Street, Boston.

THIS FREE BOOK MAY SOLVE YOUR SOAP PROBLEM

Liquid Soaps
Soaparatus
Dispensing Systems
Soaparatus Valves
Tanks and Fittings
Individual Dispensers



The West Latherator automatically agitates the soap into a rich, creamy lather before it leaves the valve. This saves waste and cuts soap costs in half.



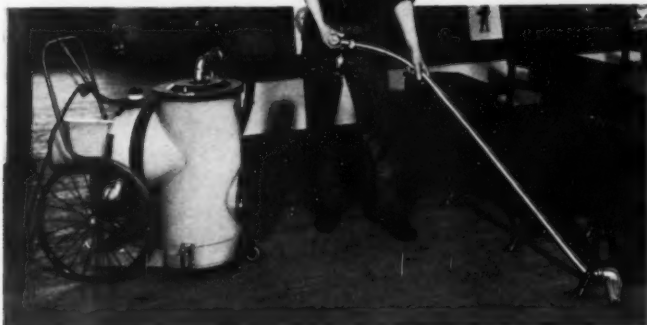
WEST DISINFECTING CO.

DEPT. C., 42-16 BARN STREET—LONG ISLAND CITY—NEW YORK

THE LARGEST ORGANIZATION OF ITS KIND IN THE WORLD

**CLEAN
FLOORS**

**CLEAN
SCHOOLS**



Keep the school floors clean and the rest is easy. For it is the floor that receives a new layer of incoming dirt every day. It also receives all the dust that settles in the room. Dirt and dust is redistributed from the floor unless it is removed frequently and thoroughly down to the last crevice and corner.

Spencer Portable and Central Vacuum Cleaning Systems have a powerful vacuum with quick-acting tools and are easy for one man or woman to operate.

They save cleaning time and do better work than can be done by hand methods.

We would like to demonstrate the Spencer Portable and let you see the practical and permanent economies produced by these machines.

SPENCER
HARTFORD

CENTRAL AND PORTABLE
VACUUM CLEANING SYSTEMS

S-21

THE SPENCER TURBINE CO., HARTFORD, CONN.

DAYTONS *Used*
in many
SCHOOLS



Many leading schools use the Dayton Safety Ladder for its economy and safety. The man on a Dayton Safety Ladder has no fear of falling. He uses both hands, works faster and better.

The Dayton does not tip or wobble, has wide platform with protecting guard rail. Made of airplane spruce—light and strong—in sizes 3 to 16 feet. Moderately priced.

Write Dept. NS-6 for details

THE DAYTON SAFETY LADDER CO.

121-123 West Third St., Cincinnati, Ohio

DAYTON
Safety Ladder

(PATENTED)

Stock carried on Pacific Coast by E. D. Bullard Co., Los Angeles and San Francisco, and by 100 other distributors from coast to coast. Made and distributed in Canada by Safety Supply Co., Toronto.

On the Air During June

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Daylight Saving except when otherwise specified.

Daily

National Farm and Home Hour¹—1:30-2:30 p.m. (NBC-WJZ).

Monday

Children's Songs, Stories and Novelties,² Dorothy Gordon—5:15-5:30 p.m. (CBS-WABC).

Tuesday

Science Service Series, Watson Davis, Editor—4:30-4:45 p.m. (CBS).

You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).

June 2—Personal Liberty, John W. McCormack, Member of Congress, 12th Massachusetts District, and Roger N. Baldwin, director, American Civil Liberties Union.

June 9—The Living Constitution, Charles A. Beard, author and former president, American Political Science Association and American Historical Association.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).

June 3—Eating Habits of Children, Dr. L. G. Bogart, biochemist and nutrition authority, New York City.

June 10—Emotional Life of the Child, Mandel Sherman, associate professor of educational psychology, University of Chicago.

The Cavalcade of America, dramatization of

significant moments in American history—7:00-7:30 p.m. (CBS-WABC).

Thursday

Radio Guild's Historical Dramas—4:30-5:30 p.m. (NBC-WJZ).

Friday

Magic of Speech—2:00-3:00 p.m. (NBC-WEAF).

Saturday

Cincinnati Conservatory of Music—11:00 a.m.-12 m. (CBS).

Boston Symphony Orchestra—8:30-9:30 p.m. (NBC-WJZ).

Sunday

University of Chicago Round Table—12:30-1:00 p.m. (NBC-WEAF).

Speakers and Events in International Field (transatlantic broadcast)—12:45-1:00 p.m. (CBS).

Everybody's Music, with Howard Barlow and the Columbia Symphony Orchestra—3:00-4:00 p.m. (CBS).

Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m. (CBS).

Sunday Symphony Concerts, 10:00-11:00 p.m. (NBC-WEAF).

¹Except Sunday.

²Also Wednesdays and Fridays.

Band Lessons to Be Broadcast

Band lessons will be broadcast in a weekly thirty-minute series, starting next September, by the University of Kentucky in cooperation with the Kentucky Band and Orchestra Directors' Association. The first program of the series will be heard Tuesday, September 29, from one to one-thirty in the afternoon, and the last on Tuesday, December 15. If the lessons arouse sufficient interest, the series may be extended into 1937. Musicians from the university band will demonstrate the lessons and a staff announcer will give instructions. A text will be available for a nominal price.

Radio to Honor Edison

Coast-to-coast programs are being presented by the Columbia, National and Mutual broadcasting systems during May, June and July, in a drive to raise funds to establish one hundred scholarships in memory of Thomas Alva Edison. One set of programs is based on a series of episodes from the life of Edison, called "The Productive Years."

Hans Christian Andersen Honored

Hans Christian Andersen was honored on his 131st birthday anniversary by a special broadcast given over WNYC, the municipal station in New York City.

Broadcasts From Carnegie

Students from the departments of music and drama at Carnegie Institute of Technology have been presenting a series of local broadcasts over WCAE in Pittsburgh on Tuesdays from 2:30 to 3:00 p.m. On these programs music and drama alternate, the music having included the orchestra, the Madrigal Choir, chamber music and soloists.

To Prevent Program Withdrawal

A broader program, which will considerably increase the scope of its activities, has been adopted by the National Committee on Education. The committee is now promoting radio programs that qualify for school use under unimpeachable auspices and through facilities that are not subject to withdrawal or dictation.

Michigan State Broadcasts

Nine courses were offered by the Michigan State College of the Air during its spring term: a survey of English literature; criminology; ethics of Christianity; intermediate Spanish; elementary Spanish; flower growing; vegetable gardening; business writing; growing up in the family. No credit was offered for the courses, which were broadcast over WKAR by Michigan State College.

Field of Educational Broadcasting Expands

Educational broadcasting, however difficult to define as a whole, is made up of three principal divisions: broadcasting into the schoolroom of regular classroom studies correlated to the curriculum; broadcasting of outstanding news events, eye-witness accounts, speeches, music and drama assigned for home listening, and adult or "continuous" education.

In this way General James G. Harbord, chairman of the board of Radio Corporation of America, defined radio education in an address at the semi-centennial celebration of the University of Chattanooga. "Lincoln's Gettysburg Address, in cold type, has been a required assignment of millions of American pupils since the words were first spoken," he continued. "If that great speech were being made tomorrow, teachers in the United States and in other countries as well would be saying to their classes, 'I suggest that you tune in your radio to President Lincoln's talk.' The students who followed that simple bit of advice would never forget the experience."

Radio, in its educational applications, maintained General Harbord, can never take the place of the classroom teacher and the printed word. It is most successful when it heightens the desire of its hearers for more study and reading. He cited, for an example, the seniors in New York City's high schools who are required to hear the broadcasts of America's Town Meeting as part of their regular homework, and then to conduct similar meetings in their classes.

Aside from the actual broadcasting of the program, radio has been providing supplementary textbook material for use in the schools. Last year 10,000 schools throughout the country received textbooks that augmented the Radio Guild's Shakespeare productions. The Educational Bulletin monthly was mailed on request to a list of 25,000 names. Two hundred thousand copies of the Damrosch note books and 25,000 copies of the Damrosch teachers' manuals were issued. He emphasized in this connection the note books for blind children that are provided in Braille by the cooperation of NBC and the Red Cross.

Best Educational Program

America's Town Meeting of the Air was recently selected as the best and most popular educational radio program of the year by the Women's National Radio Committee. Gabriel Heatter of the Mutual network was selected as the best news commentator.



When Youngsters swallow their Food without Proper chewing

When children are losing their baby teeth, they are inclined not to chew their food any more than they have to and thus lose the habit of good mastication so important to health and good teeth. Many physicians and dentists say, "Let children enjoy gum at this time. They never need to be urged to *chew* gum."

University Research forms the basis of our advertising.
The National Association of Chewing
Gum Manufacturers . . . Pier 23,
Rosebank, Staten Island, New York.

FOUR FACTORS TOWARD GOOD TEETH ARE: RIGHT FOOD, PERSONAL CARE, DENTIST'S CARE AND PLENTY OF CHEWING EXERCISE. . . THERE IS A REASON, A TIME AND PLACE FOR CHEWING GUM

In America's Most Modern School!



a glimpse of the kindergarten in Hibbing's famous "glass brick" school. Heywood-Wakefield chrome frame desk sets with tops in gay colors were used.

THE nationally famous Park School, Hibbing, Minnesota, is equipped with Heywood-Wakefield School Furniture. In this splendid modern building, vacuum glass was used in wall construction and "Electric eyes" control classroom lighting. Naturally, the seating equipment had to be modern, comfortable, hygienic, and sanitary. That's why the committee selected Heywood-Wakefield to develop special chrome frame chair and desk sets. May we tell you more about them and about the many other practical school furniture items in our line?

HEYWOOD-WAKEFIELD

Makers of Practical School Furniture
General Offices:
174 PORTLAND STREET, BOSTON
Sales Offices in all Principal Cities

REGIONAL NEWS

Eastern States

NEW JERSEY

Newark.—A history of the schools of the city was compiled by Supt. John H. Logan for the special charter centennial supplement of the *Star Eagle*. The history indicates that although the schools of the city date back to the eighteenth century, the first public school was not established until 1844. Illustrating the article is a picture of a small structure still standing in Newark, said to be the first schoolhouse in New Jersey, and a picture of the new \$1,000,000 Weequahic High School.

NEW YORK

Albany.—A committee to organize materials or units of instruction that may aid superintendents, principals and teachers in presenting the problems that confront the state in connection with highway and traffic safety has been appointed by the board of regents.

East Syracuse.—Fire destroyed the three-story East Heman Street Grade School, causing a loss of \$100,000. It apparently started in the boiler room and ate through a steel ceiling to reach the first floor.

Odessa.—Twenty-one districts will be consolidated into a centralized school district here as the result of a vote taken recently.

Somers.—Six overcrowded one-room schools will be consolidated in the \$270,000 centralized grade school building recently voted for erection with no other aid than that usually given by the state.

PENNSYLVANIA

Altoona.—The *Mountain Echo*, the Altoona High School paper, recently printed the results of a poll it had conducted among the pupils in the school on questions relative to world peace. Government control of the manufacture of munitions won by a vote of 2,306 to 366; entrance into the League of Nations was disapproved, 1,959 to 574; compulsory military training was voted down, 1,857 to 878, but 1,892 to 919 were in favor of a larger army. In regard to the church taking a definite stand to end war, the affirmative won by only 100 votes.

Sunbury.—As a result of the flood a new school may be built in the sixth ward. Six of the nine school buildings were affected by the waters, which damaged heating plants, gymnasiums, shops, playing fields, books and supplies.

Wilkes-Barre.—Flood damage to the

schools has been estimated at \$19,300 by C. P. Shoemaker, superintendent of buildings. Most of the damage was at Meyers High School, where the stadium was damaged to the extent of \$12,000 and the school proper, \$900. Four feet of water at Coughlin High School ruined the basement floor, necessitating a new gymnasium floor at a cost of \$1,160, and damaged doors, woodwork, electrical and cafeteria equipment, boilers and supplies bringing the total to \$5,350.

Middle Western States

ILLINOIS

Decatur.—Because of a decrease in pupil population it may not be necessary to replace two teachers who are leaving this June. The board feels that, although the upward trend in secondary school enrollments may continue for several years, teachers released from grammar school positions may be shifted to any vacancies occurring on the staff of the secondary schools. Five or six rural schools in the county may be closed because of small enrollment.

INDIANA

East Chicago.—Backgrounds of twenty-seven races, nationalities and cultures are enrolled at the Riley School, and the teachers in the school are continually confronted with old racial differences. To combat this problem they recently organized a "Foreign Homeland Exhibit," which proved an effective means of promoting good will through the recognition of the cultural contributions of others. At the same time the exhibit was a cooperative project, which increased interest in subject learning in various departments.

South Bend.—Pay increases amounting to \$21,000 and more liberal allowances for sick leave have been voted the teachers by the board of education. A new minimum salary has been set at \$1,125 as compared with the previous minimum of \$800 for elementary and \$1,000 for high school teachers. Distinction between elementary and high school salaries has been abolished. Three days' sick leave at full pay and twelve additional days at half pay were established.

IOWA

Alden.—A two-week course to teach girls to square a board and drive a nail and to teach boys to prepare a simple meal has been instituted at the high school. This course is not expected to make the pupils proficient in these tasks,

but to give them a measure of independence when confronted with emergencies.

New Market.—A course in homemaking for sophomore boys that extends the entire year is being offered at the high school. Cooking, sewing, textiles, health and personal hygiene, budgeting, household bookkeeping and social etiquette are covered by the course.

Sioux City.—A reduction of approximately 25 per cent in the rate on fire insurance and from 10 to 12 per cent on wind storm insurance has been secured by the board of education. The total saving will amount to about \$1,000 a year.

KANSAS

Hutchinson.—The high school band recently complained of noise from the buzz saws in the shop room downstairs and asked for a soundproof room for its rehearsals.

Russell.—One of the best publicity departments of any county in the state is that conducted by Floyd Wright, superintendent of Russell County schools. Mr. Wright runs a news column in five papers published throughout the county.

MINNESOTA

Barnesville.—A pupil work exchange plan has been put into effect by the pupils of the high school. A list of pupils who want work after school and on Saturdays, such as washing cars and windows, tending children, spading gardens or doing other odd jobs, is kept by the exchange, and requests for work have been made through the newspapers, asking the cooperation of the townspeople.

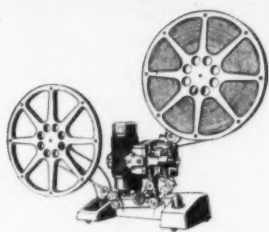
Minneapolis.—Report cards that comment on the child's social adjustment and school achievement without using any type of grades have been introduced into the primary grades of the city schools. Factors evaluated are: emotional stability, special abilities and interests, personality assets, characteristics with which the child needs help, behavior, health and speech.

Rochester.—The public schools this spring inaugurated their sixth good citizenship contest, with emphasis on the protection of lawns and property. The contest is a character building project based on good sportsmanship.

St. Cloud.—A peace forum has been organized by the pupils of the technical high school. Meetings are open to any pupils interested and to alumni.

MISSOURI

Rader.—The twenty-one-year-old school teacher whose quick thinking saved the lives of her seventeen pupils when a tornado flattened her school in March has now taken into her own hands the project of replacing the destroyed building. After talking to the directors



Bell & Howell Filmo Projectors' FLICKERLESS PICTURES *Safeguard Young Eyes*

Early motion pictures flickered obviously and admittedly tired the eyes. Today, few projectors cause readily apparent flicker, and some have eliminated flicker.

But even though so reduced that it escapes recognition, flicker tends to cause eyestrain. That is one reason why Bell & Howell Filmo 16 mm. silent and sound film projectors, out of which all flicker has always been eliminated by superior engineering, are preferred.

Before you buy, see in a Filmo demonstration how completely free from flicker are Filmo pictures. Notice, too, Filmo's superiority in those other eye-safeguarding requirements—picture steadiness and uniform screen illumination.

There are sound and silent Filmo 16 mm. Projectors for every school need, priced from \$125.

BELL & HOWELL COMPANY
1855 Larchmont Ave., Chicago
NEW YORK • HOLLYWOOD • LONDON

END YOUR PADLOCK
PROBLEMS WITH



COMBINATION PADLOCKS

THESE strong, dependable locks—built like the famous Yale Bank Lock—provide the highest degree of security combined with simplicity of supervision.

After the three combination numbers have been dialed, the dial is turned to the right to release point where the shackle automatically jumps open. Closing the shackle automatically deadlocks the bolt and disperses all three tumblers.

Write us your requirements for next term and learn how economically you can have YALE Security and Convenience for your locker system.



NOTE: YALE also makes a complete line of built-in type combination locker locks. Illustrated folder on request. Address:

THE YALE & TOWNE MFG. CO.
STAMFORD, CONNECTICUT, U. S. A.

PPROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome. H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

HYNISON, WESTCOTT & DUNNING, INC.
Baltimore, Maryland



After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

MERCUROCHROME, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

of the district school board who had no funds to finance its construction and didn't know where any could be obtained, the teacher descended on Springfield and the WPA. The school will be built.

NEBRASKA

Tekamah.—A 750-watt picture machine has been purchased for use in the high and grade school. The school auditorium is equipped with a booth and sound screen and can accommodate 700 pupils.

OHIO

East Liverpool.—One hundred and twenty pupils, none of them over eleven years old, were marched to safety by Mary Andrews, principal of the four-room school, and three teachers, when fire swept through the two-story brick building. A blow-torch, being used by a tinsmith who was repairing the roof, caused the fire.

Toledo.—Teachers here voted to receive their salaries on a twelve-month rather than a ten-month schedule, when asked to express their preferences. . . . Waite High School has installed a point system designed to distribute offices and extra-curricular recognition among a larger number of pupils. Different offices and activities will carry various point ratings, and twenty-five points is the maximum any pupil may carry.

Youngstown.—In order to give pupils enrolled in the vocational and practical arts department of Princeton Junior High School a varied training in repair and maintenance work, the services of the department have been offered to the faculty in a bulletin which lists the repair of electrical cords and appliances, cleaning and oiling typewriters and sewing machines, repairing locks, replacing windows and picture glass, soldering and patching metal vessels, repair and finishing of furniture, sharpening tools and truing up motor and generator armatures.

Southern States

GEORGIA

Rome.—The Negro school recently destroyed by fire is being replaced by a four-room brick structure at a cost of \$5,000.

MISSISSIPPI

Tupelo.—The WPA has begun rebuilding the schools destroyed in the tornado. The reconstruction program will cost about \$300,000 and include the erection of a Negro school, two grammar schools, restoration of the high school and construction of a new junior and senior high school. About \$160,000 worth of insurance will be available for the program, the rest of the necessary funds will be furnished by the federal government. The two grammar schools were

damaged so severely they will have to be razed, but their materials can be salvaged for rebuilding. About 60 per cent of the high school is beyond salvaging. The cost estimate for the program includes replacing the furniture of the schools, most of which was damaged to such an extent that it cannot be used. Classes are now being held in vacant stores, vacant rooms over stores and in church buildings, all of which were hit by the storm, the teachers carrying on under the greatest difficulties.

SOUTH CAROLINA

Columbia.—Ninety-two per cent of the graduates of the school of education of the University of South Carolina of the class of 1934-1935 have been placed in educational work.

VIRGINIA

Danville.—For the first time in many years the school board has stayed within its budget and expects to have a small surplus at the end of the year. Credit for this record of school administration is given to the system of bookkeeping installed a year ago, which has permitted the board to absorb a deficit of \$3,948 brought over from last year as a paid obligation.

Richmond.—The *Virginia Journal of Education* is taking a questionnaire vote relative to changing from a professional magazine to a weekly or semimonthly newspaper.

WEST VIRGINIA

Charleston.—The final survey on the total estimated flood damage to schools has been reported by W. W. Trent, state superintendent of free schools, as totaling \$62,025.85. The work of renovation and rehabilitation will be done during the summer as WPA projects.

Western States

CALIFORNIA

Antioch.—Twenty-five of the forty-eight teachers in the schools will be let out in June, 1937, as a result of the passing of the teacher-tenure law, which provides that if a teacher is employed for more than three years, the board must automatically renew her contract each year. Board members said their announcement was being made now in order that the teachers affected would have time to locate new positions. They further stated that many of those being let out were well qualified for permanent positions, but that in order that no discrimination be evidenced, a wholesale dismissal had been decided upon. These dismissals will be canceled if the 1937 legislature amends the present law.

Fresno.—A school for the instruction of janitors in the handling of boiler equipment is to be held one night a week for

six weeks. There are thirty-five janitors in the school system who need such instruction, according to the board of education, and they will be paid one dollar a night for attending.

Greenville.—Seventy per cent of the pupils enrolled at the high school are members of the band, and the only apparent reason the other 30 per cent are not members is that there is a lack of instruments. Juniors and seniors with no previous musical experience have been passed over in preference to underclassmen.

Sacramento.—A policy of giving preference to hard of hearing candidates applying for positions to teach lip reading to hard of hearing adults in public school classes has been recommended by the advisory board of normal instructors of lip reading, state department of education. In asking city superintendents to adopt this policy, the board points out that often this is the only form of vocational compensation open to teachers with impaired hearing. Because of their own impairment, such teachers understand the many psychological problems that arise through loss of hearing.

OKLAHOMA

Oklahoma City.—A new budget calling for nearly \$200,000 over that of last year provides for an increase of \$100 a year in the salary of each teacher. . . . The Oklahoma City University is celebrating its silver jubilee this year.

Sapulpa.—The school board recently voted its teachers a bonus amounting to 25 per cent of one month's salary, to be paid from surplus funds.

Seminole.—The \$75,000 grade school building, which was constructed in 1928, has been condemned. Water draining from the roof of the building and from a near-by hill has worn away the foundation of the building. The school has an enrollment of 1,000.

TEXAS

Dallas.—In connection with the Texas Centennial Exposition, school children throughout the state are collecting, for their school libraries, books devoted to Texas or by Texas writers. A list of more than 100 of these books has been prepared and sent to the schools. Special recognition will be given to schools that complete their shelves during the centennial.

1,000 Teachers Attend Exposition

Approximately 1,000 teachers, school administrators and faculty members attended a recent educational exposition at the Oregon Normal School at Monmouth, presided over by J. A. Churchill, president of the normal school.

*Play Safe
with Safety*

EverWear PLAYGROUND APPARATUS

Minimize accidents on your school playground. Give children the protection *Safety EVERWEAR EQUIPMENT* assures.

Write for Catalog 28

*For Beach and Swimming Pool Equipment,
write for catalog 28W*

**THE EVERWEAR
MANUFACTURING CO.**
SPRINGFIELD, OHIO

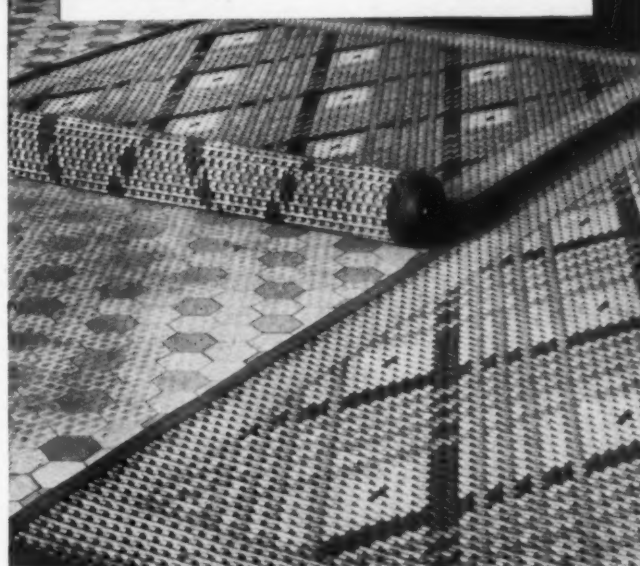
Reduce Cleaning Costs

by trapping the dirt at the door with attractive, durable EZY-RUG Colored Rubber Link MATTING. Prevents filth and grit from being tracked through the building. Slip-proof and trip-proof.

Write for descriptive literature and prices.

A Mat for Every Purpose

AMERICAN MAT CORPORATION
1717 Adams St. Toledo, Ohio



**When The Best Is Required
Specify
SQUIRES' PRODUCTS**



Bakelite Boston
Inkwell No. 60

Used by all Leading American School Furniture Manufacturers.

Handled by all Leading School Supply Dealers.

The name SQUIRES eliminates the chance of cheap substitutions on your orders.

SQUIRES INKWELL COMPANY
205 ROSS ST. PITTSBURGH, PA.

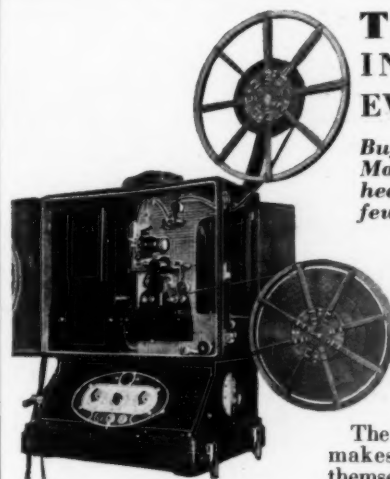
TALKIES IN SCHOOLS, EVENTUALLY—

*Buy A Silent Projector
Made for Sound. Sound
head can be fitted in a
few hours.*

DeVry manufactures the most complete line of motion picture equipment in the world; 16 or 35 mm. Silent or sound—cameras and projectors.

The DeVry Purchase Plan makes projectors pay for themselves.

More DeVry Sprocket Intermittent Portable Projectors—counting 16 and 35 mm., have been sold, than all other sprocket makes combined.



The DeVry 16 mm. Sprocket Intermittent Projector—the Sensation of 1935-36 with Silent Chain Drive and Double Exciter Lamp Socket.

**THE NATIONAL CONFERENCE on VISUAL
EDUCATION and FILM EXHIBITION**
CHICAGO - - June 22 to 25th, 1936

Sign Card below for free membership card and program

Name.....

Address.....

Position.....

HERMAN A. DE VRY, INC., 1111 Center Street, CHICAGO

NAMES IN THE NEWS • • •

Eastern States

MILDRED HELEN McAFEE, dean of women at Oberlin College, Ohio, has been elected the seventh president of Wellesley College, to succeed ELLEN FITZ PENDLETON, who is retiring. Miss McAfee, who is thirty-six years old, is a graduate of Vassar and has a master of arts degree from the University of Chicago.

DR. E. C. HARTWELL, formerly superintendent of schools at Buffalo, N. Y., has been elected principal of the Brockport Normal School, New York, succeeding DR. ALFRED C. THOMPSON, who retires this month.

DR. ALESSANDRO GHIGI, rector of the University of Bologna, the world's oldest university, is traveling from Italy to Boston University to deliver the commencement address on the morning of June 15.

DR. EDWARD L. THORNDIKE, director of the institute of educational research, Teachers College, Columbia University, is to receive the doctorate of laws from the University of Edinburgh.

ROY E. MOSHER, head of the modern language department at Lawrenceville School, Lawrenceville, N. J., has been appointed supervisor of modern foreign languages in the examinations and inspections division of the New York State education department.

MARK R. SHIBLES, principal of Center School, Mattapoisett, Mass., has been appointed chairman of the committee of principals and superintendents who are preparing a bulletin on character education for elementary schools for the Massachusetts state department of education.

DR. PAYSON SMITH, formerly commissioner of education for Massachusetts, has been appointed lecturer on educational administration at Harvard University graduate school of education.

BERTHA A. LAWRENCE, assistant principal of Central High School, Trenton, N. J., has been appointed assistant professor of secondary education at Trenton Teachers' College.

CLARENCE E. ARMSTRONG, a former teacher at Madrid and Adams Center, was elected fifth district superintendent of schools for Canton, Russell, Pierpont, and Clare, N. Y., a territory that includes sixty-six school districts and five union schools. He succeeds ROSE M. LIBBY, who is retiring after twenty-five years of service, having held this position since it was established.

J. EDWARD HURLBURT, superintendent of the Broome County, N. Y., second school supervisory district for twenty-four years and for thirty-six years associated in an administrative position in the school system of that county, has announced his resignation to be effective July 31.

DEVILLO SLOAN, principal of the high school at Elbridge, N. Y., was elected district superintendent of Onondaga County, for the district comprising Ly-sander, Salina, Van Buren and Elbridge. He succeeds MANFORD D. GREEN, who is retiring from that position after having held it for thirty-five years.

RALPH RADCLIFFE, superintendent of public schools at Dormont, Pa., since 1919, died recently following a week's illness caused by an acute attack of appendicitis. Before coming to Dormont, Mr. Radcliffe had taught and been principal at several Pittsburgh schools.

MARGARET J. O'DONNELL, who for fifty years was a member of the teaching staff at Fort Edward, N. Y., has been honored by having the name of the Seminary Street School changed to the Margaret J. O'Donnell School. Miss O'Donnell retired last December.

MARTIN MENDEL, director of high school organization of the board of education and principal of the Eastern District Evening High School, Brooklyn, N. Y., died after a short illness. Mr. Mendel at one time was administrative assistant at the Thomas Jefferson High School, Brooklyn.

WARREN K. YERGER, principal of the Alexis I. Du Pont High School, Wilmington, Del., died following a six-month illness. Mr. Yerger was fifty-six years of age.

CARL A. MAGNUSON, guidance and athletic director at the high school at Bristol, Conn., has been appointed principal of a high school now being erected at South Windsor, Conn.

JAMES F. DOWLING, superintendent of buildings, grounds and repairs at Jersey City, N. J., died recently.

Middle Western States

THE REV. ALPHONSE M. SCHWITTALLA, dean of the school of medicine, St. Louis University, has been elected president of the North Central Association of Colleges and Secondary Schools.

DR. J. O. M. BROEK, geographer, University of Utrecht, Netherlands; WILLIAM LINE, psychologist, University of

Toronto, and MALCOLM PRICE, assistant director of public schools, Detroit, are among the guest lecturers augmenting the teaching staff at the summer session of the University of Iowa's college of education.

GEORGE F. CASSELL, a district superintendent of Chicago schools, was elected assistant superintendent of the public school system in charge of high schools to succeed WILLIAM H. JOHNSON, the new superintendent.

FRANK M. SHELTON, superintendent of schools at Springfield, Ohio, has been appointed a state high school supervisor in the department of education.

JOSEPHINE P. SIMRALL, dean of women at the University of Cincinnati for the last fifteen years, and assistant professor of English and dean of women at the University of Kentucky before that, has announced her retirement to take effect at the close of the academic year. Her successor has not been appointed.

DR. ARTHUR K. LOOMIS, principal of the University of Chicago High School, has been appointed superintendent of schools at Shaker Heights, Ohio.

BERNARD C. SHANKLAND, superintendent of schools at Cadillac, was elected to a three-year term as a director of the Michigan Education Association, succeeding LOV NORRIS, superintendent of schools at Houghton.

ELLIS R. BELL, superintendent of Liberty and Center township schools of Union County, Ind., has been appointed superintendent of schools for Winchester, Ind., to succeed A. R. WILLIAMS, who died recently as the result of injuries received in an automobile accident. HARLEY GARVER, superintendent of schools at Union City, was slightly injured in the same accident. BUELL E. CRUM, principal of the Kitchel High School in Union County, has been named principal of the high school at Winchester.

JOHN E. BAGGETT, superintendent of schools at Lake Forest, Ill., for the last thirty-three years, has announced his retirement effective at the end of the school year in June. Mr. Baggett, who is seventy-two years old, will be given the title superintendent-emeritus.

W. A. CRESAP, principal of the high school and dean of the junior college at Estherville, Iowa, died at the age of thirty-eight. He sustained an injury during a faculty-senior class basketball game and lived but four days.

C. H. CARRICK, superintendent of schools at Three Rivers, Mich., since 1924, and an educator for nearly forty years, has announced his retirement from that position. WALTER HORST, principal of schools at Three Rivers for



"NEO-CLASSIC B"



"PRESS-TOE LOCK"

FOLDING CHAIRS WITH STYLE, BEAUTY, STRENGTH, and COMFORT

FOR AUDITORIUM
AND CLASSROOM



"TAB-L-ARM"

**Sturdily Built
Guaranteed**
Many Styles and
Prices to Choose From

WRITE FOR CATALOG
AND PRICES

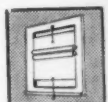
LOUIS RASTETTER & SONS CO., Fort Wayne, Ind.

FURNITURE and EQUIPMENT



Since 1907 Beckley-Cardy Company has supplied furniture and equipment for hundreds of leading Educational institutions. High standards of durability, flexibility for varied uses, and encouragement of correct posture are outstanding Beckley-Cardy features. The new Furniture and Equipment Catalog just printed gives full information and illustrations. Sent on request.

SHADES



Beckley-Cardy's "Sightsaver" Double Roller Shades afford "top" lighting and proper ventilation as well. They are durably built and scientifically constructed for correct light diffusion. Available in various grades of cloth. Write for new Shade Catalog, just printed.

Send For New Catalogs

The new special Catalogs on the materials mentioned above are prepared especially for your convenience. Large illustrations, easy-to-read type, and handy indexing make these books invaluable aids to the school purchasing department.

BECKLEY-CARDY
1624 INDIANA AVE., CHICAGO

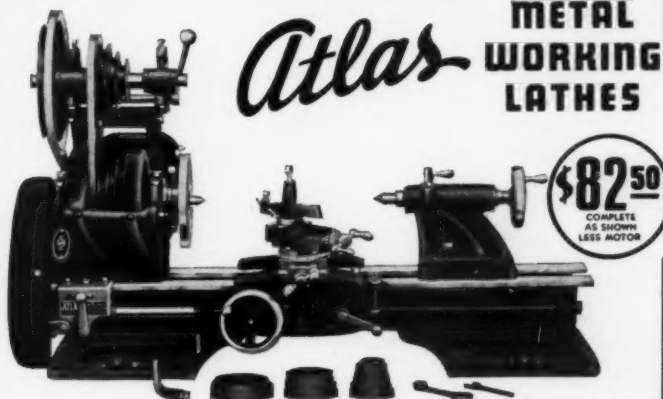
By Preference
it's **DeWITT OPERATED**
HOTELS
Genuinely Friendly

- ☐ In Cleveland it's **The HOLLENDEN**
- ☐ In Columbus it's **The NEIL HOUSE**
- ☐ In Dayton it's **The BILTMORE**
- ☐ In Akron it's **The MAYFLOWER**
- ☐ In Toledo it's **The NEW SECOR**
- ☐ In Savannah (Ga.) it's **The GEN'L OGLETHORPE**
- ☐ In Miami Beach it's **The FLEETWOOD**

DeWitt Operated Hotels
feature

Unusually Comfortable Rooms at Reasonable Rates and the finest of Food and Beverages, Carefully Prepared and Served.

NEW! MODERN!



**METAL
WORKING
LATHES**

\$82.50
COMPLETE
AS SHOWN
LESS MOTOR

MODERN DESIGN MODERN CONSTRUCTION

This new Atlas is an ideal metal lathe for the school shop—designed for accuracy and efficiency, and built to stand the wear of inexpert student use. Bed is 36" long. Has 10 1/4" swing, takes 18" between centers, and may be fitted with attachments for all machine shop operations.

Other new Atlas metal lathes priced from \$35.50 up. "Better to have several low-priced lathes and give more students a chance," say many shop teachers, "than one expensive model and a waiting line." Write today for latest catalog of metal and wood lathes, drill presses, tools and attachments.

FEATURES

Self-contained counter-shaft and universal motor bracket. Threading range 4 to 96 per inch. 16 speeds from 28 to 2072 R.P.M. Heavy duty enclosed on-off switch. Automatic reversible power feeds. Threading dial. Graduated tailstock ram. Modern V-belt drive. New heavy cast iron gear guard. New threading chart. New design carriage. Laminated shims throughout. Heavy, new design compound rest. Well and pin for center lubricant. Scientific weight distribution.

ATLAS PRESS COMPANY
672 N. Pitcher St., KALAMAZOO, MICH.
Complete displays at 35 E. Wacker Drive, Chicago,
130 W. 42nd St., New York, 113 N. 3rd St., Philadelphia.

ATLAS PRESS CO. 672 N.
Pitcher St., Kalamazoo, Mich.
Kindly send your latest catalog.
Name.....
Address.....
City and State.....

seventeen years, has been appointed to succeed Mr. Carrick.

HARRY A. DEAN, superintendent of schools at Crystal Lake, Ill., for twenty-six years, died at his home there at the age of seventy.

Western States

JOSEPH POMEROY NOURSE, principal of Galileo High School, San Francisco, has been named city superintendent of schools to replace Dr. EDWIN LEE. Mr. Nourse assumes office formally on July 1, but in the meantime he will be vested with the title of deputy superintendent in order that he may take over his responsibilities immediately. He has been connected with San Francisco schools since 1901, and has been president of the San Francisco Teachers' Association several times.

JESSE R. OVERTURF, president of the northern division of the California Teachers' Association, has been named superintendent of schools at Palo Alto, Calif., to succeed A. C. BARKER. Mr. Overturf was deputy superintendent of schools in Sacramento for eleven years.

ELLIS A. JARVIS, San Pedro, Calif., has been appointed assistant supervisor of secondary curriculum in the school system at Los Angeles.

A. L. THRELKELD, president of the Department of Superintendence, will be honored at a breakfast on Wednesday morning, July 1, at Portland, Ore.

HORACE M. REBOK, editor of the *California Journal of Secondary Education*, a publication sponsored by the California Society for the Study of Secondary Education, of which he was a founder, died on April 10. Mr. Rebok, who came to California from the East, served as a high school teacher in Los Angeles from 1905 to 1907. In 1907 he was appointed superintendent of schools at Santa Monica, Calif., and was there for seventeen years.

ALBERT J. ROBERTS, who retired as principal of the high school at Helena, Mont., last June after serving in that position for twenty-seven years, was elected mayor of Helena recently.

WILLIE MAE SHERWIN, superintendent of schools at Ravalli County, Mont., was elected president of the newly organized county superintendents of that state.

J. DON GARRISON, principal of the junior high school at Norman, Okla., has been appointed principal of the high school to succeed M. M. CHURCHWELL. Mr. Churchwell has been made head of the high school at Gladewater, Tex.

R. L. MCLEAN, superintendent of schools at Thomas, Okla., and a past president of the Southwestern District Association, has been elected superin-

tendent of schools at Anadarko, Okla., to succeed H. L. HENSLEY.

C. A. RICE, superintendent of schools, Portland, Ore., has appointed a series of committees which are making extensive plans for the entertainment of 12,000 visiting teachers, school administrators and others at the meeting of the National Education Association.

S. L. DAHL, principal and athletic coach of the school at Frazer, Mont., is to be the new superintendent of schools at Joplin, Mont.

Southern States

FRED M. ALEXANDER, for nineteen years principal of the high school at Newport News, Va., has been appointed state supervisor of Negro schools to succeed the late W. D. GRESHAM.

DR. FRANK LEROND McVEY, president of the University of Kentucky, has been elected president of the Kentucky Education Association.

DR. CLARENCE M. DANNELLY, professor of education, University of Alabama, has been elected to succeed W. R. HARRISON as superintendent of schools at Montgomery, Ala., a combined city and county unit.

J. C. HARRIS, superintendent of the Georgia School for the Deaf, Cave Spring, for twenty years, has announced his retirement to take place this month. C. H. HOLLINGSWORTH, superintendent of schools at Graymont, Ga., has been elected as his successor. Professor Harris has a record of sixty-one years in the service of education behind him.

E. S. RICHARDSON, superintendent of schools at Webster Parish, La., was elected president of the Louisiana branch of the National Vocational Guidance Association.

WILLIAM J. CONKWRIGHT, teacher and director of physical education at Clark County High School, Clark County, Ky., has been elected superintendent of schools at Clark County to succeed BOSWELL B. HODGKIN, who has been made head of the school system at Winchester, Ky.

J. H. PARKER, principal of the high school at Harrodsburg, Ky., for seven years, has been appointed superintendent of schools at Lebanon, Ky., to succeed the late J. R. STERRET, who had held the position for twenty-six years.

SUPT. R. L. JONES of Memphis, Tenn., died recently after an illness that brought about his retirement more than a year ago. EARNEST BALL succeeded Mr. Jones upon his retirement.

MRS. NELLE MCNAMARA was elected superintendent of schools for Montgomery County, Ky., for a two-year period.

E. H. HARRELL, who two years ago

left McMoresville, Tenn., to accept the superintendency of schools at Bells, Tenn., is returning again to be principal of the McMoresville High School.

Principals to See Subject

Correlation Demonstration

The program of the Department of Elementary School Principals, meeting with the N. E. A. at Portland, has been divided into two sessions: Appraising the New School and Its Educational Outcome, and Teaching the Implications of Religion in the Teaching of Social Sciences.

Arthur F. Corey, assistant county superintendent of schools, Orange County, Calif., will address the first session on "What Happens When We Learn?" The responsibility of the principal in securing desirable educational outcomes will be discussed by Dr. Florence Hale, editor, *Grade Teacher*, and past president of the N. E. A., and the part the teacher plays in the learning process will be discussed by Dr. Joseph Rosier, president, State Teachers College, Fairmont, W. Va.

The status of the elementary school principalship in Oregon will be gone into by R. J. Maaske, deputy state superintendent of Oregon, at the second session, the rest of which will be turned over to a correlation demonstration by the pupils and teachers of Beaumont School showing how correlation may be developed in a platoon school.

2,000 Schoolmen at Anniversary

Two thousand secondary school principals and teachers attended the fiftieth anniversary of the Michigan Schoolmasters' Club held in Ann Arbor, May 1 and 2. The feature of the meeting was the annual banquet at which four of the charter members were present. These included: Prof. John Dewey, Columbia University; Prof. Benjamin D'Ooge, Michigan State Normal College, Ypsilanti; Joseph H. Drake, professor-emeritus, University of Michigan, and Levi D. Wines, Ann Arbor High School.

50,000 Texas Children to Sing

More than 50,000 Texas public school children from all parts of the state will assemble at the Texas Centennial Exposition on June 13 in a massed chorus to sing songs peculiar to Texas, according to L. A. Woods, state superintendent of schools. Special trains and 2,000 school busses will be used to transport the pupils.

CORROSIRON

ACID RESISTING HIGH SILICON IRON
FOR DRAIN LINES

*Form which we suggest be included in
your Specifications:*

All acid proof drain pipe and fittings shall be of ferro-silicon—**CORROSIRON**—or equal to comply with the following analysis:

"All acid waste and acid vent piping shall be of approved high silicon cast iron pipe and fittings of the bell and spigot type. The cast iron for acid waste and vent pipe and fittings shall contain:

"Not less than 14.25% and not more than 15% silicon.
Total carbon content below 1.12% and above .50%.
Manganese below .50%.
Sulphur below .05%.

"High silicon cast iron pipe and fittings for acid waste and acid vent pipe shall be of the thickness, etc., corresponding to extra heavy soil pipe and fittings unless otherwise approved."

CORROSIRON manufactured by Pacific
Foundry Company, Ltd.

3100 Nineteenth St., San Francisco

1400 So. Alameda St., Los Angeles	551 Fifth Ave., New York	1713 Missouri St., Houston, Texas	330 Central Bldg., Seattle, Wash.
---	--------------------------------	---	---

**We promise to
save you money!**

CHAMBERLIN WEATHER STRIPS

"SINCE 1893-THE STANDARD"

Based on our experience with thousands of schools, Chamberlin Metal Weather Strips will save you from 20% to 40% of your yearly fuel bill. They will more than pay for themselves in very few years. At the same time they give draftless comfort and warmth . . . protect the health of teachers and pupils forever. Fully guaranteed. Write for particulars.

CHAMBERLIN METAL WEATHER STRIP CO., Inc.
1234 LaBrosse Street • Detroit, Michigan

FENCE

*for the PROTECTION
of school children
and school property*

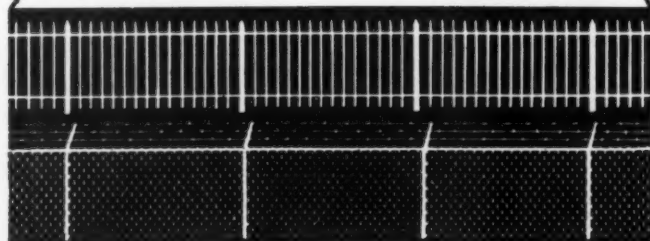
IRON and CHAIN LINK WIRE
FENCES and ENTRANCE GATES

Stewart IRON
and WIRE
FENCES

New Catalog Sent on Request

The STEWART IRON WORKS CO., Inc.

336 Stewart Block - - - Cincinnati, Ohio

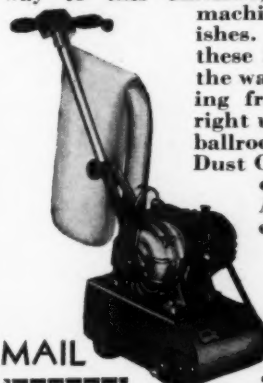


This MULTI-PURPOSE FLOOR MACHINE Is Rapidly Changing Floor Maintenance Methods

*You Can Prove This
To Yourself At Our Expense!*

ESPECIALLY DESIGNED FOR SCHOOLS

Improved floor maintenance equipment is swiftly giving way to this efficient, economical Multi-Purpose floor machine that Sands, Steel Wools and Polishes. The only machine that combines these 3 major services. You'll marvel at the way this remarkable machine, operating from any convenient outlet, works right up to the quarter-round and puts a ballroom finish on every floor. Vacuum Dust Collector picks up all dirt and dust, eliminating expensive hand labor. Any inexperienced employee can operate it.



Adopt this modern Multi-Purpose Machine for YOUR school today. It will quickly pay for itself in savings on material and labor. Write for details on our 5-DAY FREE TRIAL OFFER.

MAIL

COUPON TODAY!

LINCOLN-SCHLUETER FLOOR MACHINERY CO. 636
228 W. Grand Ave. Chicago, Ill.

Please send me complete information on the Multi-Purpose Floor Machine and details of your 5-Day FREE TRIAL OFFER.

Name.....

Address.....

City.....State.....

NOTES FOR BUYERS . . .

Just Around the Corner

What once perplexed the prep school principals has all of a sudden become a puzzler for the public school crowd. We refer, gentlemen, to the Laundry Question.

Headmasters and headmistresses finally washed their blues away in their own laundry tubs alongside the cadets' white ducks and the subdebs' shorts.

In studying plans of several huge new public high schools, we find no space allotted to the laundry. Will not some of those areas marked "Future Use" and "Unexcavated" later be assigned to laundry purposes? Experiments in several large cities indicate that probability.

A private school head passes on this suggestion: If you decide to install a laundry to serve your school system, let the architect provide the space, but do not attempt to select or place the equipment. Consult someone who knows the laundry business. He recommends a representative of the American Laundry Machinery Company, Cincinnati.

The Old Soak

At the risk of offending that family of old soaks, the Poriferae, we are constrained to report that man has created a sponge that can absorb more liquid than any one of them.

The Sponge That Man Built is of highly purified wood and cotton cellulose pulp, its spongelike construction being obtained through chemical reactions. Although tough, the new cellulose sponge becomes extremely soft and pliable when wet, and will not scratch the most highly polished surface. Moreover, it is said to outlast the natural product. The creator: Du Pont Cellophane Company, Inc., 1 West 33d Street, New York City.

Dance Steps

Clap hands for a brand new dance act. Its swing rhythms are sweeping the schools, where the very windows are sliding into hitherto impossible ventilating positions.

Before the windows go into their dance, a little device is attached to the frame. The swing movement is done with a metal shoe, which supports the window sash. The first routine is a long slide. Ordinary sash weights are attached to the sliding shoe, which carries

the weight of the sash. The next step is the pivot. Then the sash swings inward to the main ventilating position, where a catch holds it so that there is a three-inch opening at the midrail.

Why such applause over a window that can swing, you ask? Here's why: No matter how severe a storm, the window may remain open without danger of rain or snow reaching the inside window sill. A child can stand directly in front of the window and not feel a draft. When it is time to wash the windows, they may be swung inward so that both sides of the glass may be reached without the necessity of leaning outside the window frame or disturbing screens.

The new step is being introduced by the Howard Safety Window Company, Inc., Milwaukee.

Fireman, Save My Proof

Souvenirs and business papers are losses that fire insurance cannot restore. Sentimental stuff-and-nonsense figures little in institutional fires, but more than one school building has gone up in smoke and with it the papers that furnish the fire insurance companies the required "proof of loss."

For more important records and papers the Shaw-Walker Co., Muskegon, Mich., has built a new filing cabinet — Fire-File "30." It will preserve the contents under exposure to severe fire on all sides for at least thirty minutes at a temperature reaching 1,550° F. If that fails to impress you, the Bureau of Standards sets the fire protective limits of ordinary steel files at about five minutes — no more.

Fire-File "30" comes in two sizes — one for letters, the other for legal papers, contracts, specifications and the like. Of course, if one wishes to insert photographs or locks of hair, that, after all, is up to one. They may be highly inflammable to the owner, but in a holocaust they are singeproof for thirty minutes.

Pupil Enemy No. 1

Concentration is the choice fruit of schoolroom culture. If the yield seems a little low, put it down to the attack of natural enemies on the tender young plants. Pupil Enemy No. 1 is Spring herself parading by the open window.

The season, then, is our reason for

making school walls of structural glass. The sun can glance in, but the pupil can't glance out.

Sterner logic for the growing use of structural glass lies in the fact that it permits larger light admitting areas without the heat loss, condensation problems and direct sunray discomforts of ordinary glass windows. The newer glass also insulates against cold and sound. For its product, glass brick, the Structural Glass Corporation, 101 Park Avenue, New York City, claims also a saving in floor space, a 2½-inch vacuum brick wall being equal as an insulator to a 16-inch masonry wall.

Election Year

Floods, drought, extreme heat, extreme cold, attacks of termites and, of course, all mildew, rot and decay are attributable to the political party in power, and everyone knows how devilishly active all these natural forces have been under the New Deal.

Any one of these baleful influences may be kept away from the schoolhouse door by the Roddiscraft process, we are told. The Roddis Lumber & Veneer Co., Marshfield, Wis., guarantees its waterproof doors against all foregoing Acts of God and the Democratic (or Republican) Party. Its completely waterproof doors cost only slightly more than untreated wood doors. In fact, architects can specify thin face veneers for either exterior or interior doors with a guarantee that the Roddiscraft glue process will make them so strong that core and veneer are literally welded into one solid block.

Sweet, Sweet Home

Be it every so humble, there is no place like home for a poor lunch. Happen home unexpectedly some noon and see if the pickings are not mean. Next day's plate lunch at the school cafeteria will taste like the president's dinner at the Epicure's Club.

If you think the youngsters bolt their plate lunch without paying attention to the pretty plate it is on, you are fifty per cent wrong. They bolt, but we'd wager that a child would turn down the same lunch, two cents cheaper, if it appeared on a coarse, chipped bluish-white plate. Better china does not mean higher luncheon prices, for it is more durable. Many cafeteria managers know from experience how important are design and color, and so does the Onondaga Potteries, Syracuse, N. Y., whose Syracuse china is admired and handled — oh, so carefully — by school children in lunchrooms where it is used.

20% TOP SAVINGS + 50% OVEN SAVINGS = $33\frac{1}{3}\%$ GAS SAVINGS

**APPROXIMATELY
20% or more
SAVED HERE**

Where 60% of the gas in the average range is consumed.

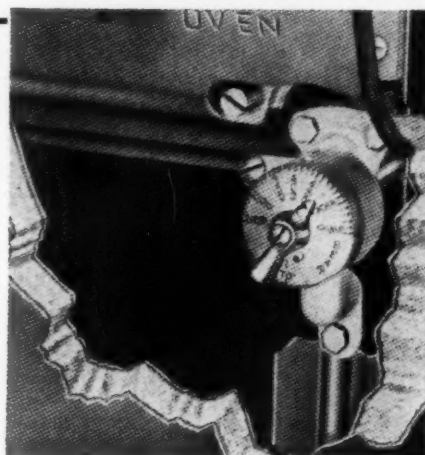


VULCAN RADIAL FIN TOP

This patented Vulcan feature increases heat absorption surface 68%. The Fins and flues retard and scrub the utmost usable heat out of the gas. The chrome nickel alloy top heats faster—holds heat longer—gives many added years of service—saves 20% in gas.

**APPROXIMATELY
50%
SAVED HERE**

Where 40% of the gas is consumed. Here Vulcan makes added savings.



VULCAN INSULATED OVEN WITH OVEN HEAT CONTROL

Here again Vulcan ranges make savings that mean lower cooking costs. Heavy insulation cuts heat loss—oven heat control gives positive temperature regulation—reduces meat shrinkage—increases number of servings per roast.

**APPROXIMATELY
 $33\frac{1}{3}\%$ or more
SAVED HERE**

These top and oven savings mean a tidy overall savings in cooking costs.



Write for Our Cost Cutting Facts

This shows how many kitchens have paid for new equipment in a short time from savings made by Vulcan. Facts showing savings in leading kitchens from coast to coast are yours for the asking.

**SCHOOL DIVISION
STANDARD GAS EQUIPMENT CORPORATION**

18 EAST 41st ST., NEW YORK

Boston • Philadelphia • Baltimore • Aurora, Ill. • Chicago • Los Angeles • Portland, Ore.

INSULATED BAKE OVENS . . . CERAMIC BROILERS . . . DEEP FAT FRYERS . . . ROASTING OVENS . . . GRIDDLES



This Beautiful School Auditorium "GREW OVERNIGHT"

Do you know how easy it is—and how inexpensive—to revitalize your old school auditorium, or build a new one quickly? With Nu-Wood, the multiple-purpose wall and ceiling finish, you can do the work almost overnight!

Nu-Wood is a predecorated wall and ceiling treatment, available in a variety of harmonious colors and having unique texture. It saves you the expense of painting and decorating. Sturdy and lasting, it has the structural strength to form enduring walls in new buildings. Or, in existing auditoriums, it goes right on over the old wall and ceiling surfaces.

But there's more to the story! Nu-Wood corrects faulty acoustics, making the spoken word audible to every hearer in the auditorium. And Nu-Wood insulates, too! Modernize your school buildings with Nu-Wood. The facts about this remarkable material are yours for the asking.



NU-WOOD

MADE BY THE MAKERS OF



BALSAM-WOOL

WOOD CONVERSION COMPANY
Room 161, First National Bank Bldg.
St. Paul, Minnesota

I want to know more about Nu-Wood. Please send me, without obligation on my part, information and illustrations.

Name _____

Address _____

City _____ State _____

THE BOOKSHELF • • •

PRINCIPLES OF TEACHING. By George Drayton Strayer, George Willard Frasier and Winfield Dockery Armentrout. New York: American Book Company, 1936. Pp. xii+295. \$2.

Simply written and effective material for those preparing to teach. The authors have succeeded in maintaining throughout a degree of simplicity and effectiveness in presentation that is refreshing.

THE EARLY MEDICI. By L. Collison-Morley. New York: E. P. Dutton & Company, Inc., 1936. Pp. xi+352. \$3.75.

For several hours the imaginative can walk again the streets of Florence, rub elbows with its story-book characters and live with the colorful and able Medici, Cosimo, Lorenzo and Pope Leo X. The reconstruction of this period is vividly and ably done. More than a mere story.

THE AMERICAN SCHOOL AND UNIVERSITY, 1936. *Eighth Annual Edition.* New York: American School Publishing Corporation, 1936. Pp. 499.

A good reference book for the superintendent's and purchasing agent's office library. Editorial content better balanced than usual this year.

PSYCHOLOGICAL FOUNDATIONS OF EDUCATION. By J. Stanley Gray. New York: American Book Company, 1935. Pp. xiii+534. \$2.35.

Education approached philosophically from the psychological point of view.

A DICTIONARY OF AMERICAN ENGLISH ON HISTORICAL PRINCIPLES. Edited by Sir William Craigie. Chicago: The University of Chicago Press, 1936. \$50.

A dictionary of American English and unquestionably the finest piece of work ever produced in the field of English. Many changes are produced in the meaning of English words as a result of transplantation to this country. Many others are distinctly our invention. This work is not only a dictionary of American speech but is in reality a history of American culture. It is doubtful whether any secondary school library can be called complete without it.

WAR AND DIPLOMACY IN THE JAPANESE EMPIRE. By Tatsuji Takeuchi. Garden City: Doubleday, Doran & Company, 1935. Pp. xix+505. \$4.50.

Our schools are profoundly ignorant of one of the most vital and possibly disturbing forces in the world—Japan. We do not even know how the country is governed. Here is an unusual book that explains accurately just how Japan is governed, the history of her diplomacy and the result that this policy may mean to the world. It is a book that should be in every secondary school library and classified as "must" reading by every social studies teacher and administrator.

THE PROGNOSTIC VALUE OF UNIVERSITY ENTRANCE EXAMINATIONS IN SCOTLAND. *International Examination Inquiry. Publications of the Scottish Council for Research in Education, IX.* London: University of London Press, Ltd. 1936. Pp. ix+197. Five Shillings.

Presentation of the results of two Scottish university examinations which were initiated by the International Institute of Teachers College, Columbia University, to determine their prognostic value. As might be anticipated, the results are neither completely even nor very conclusive.

ESSAYS ON EXAMINATIONS. By Sir Michael Sadler and Others. London: Macmillan & Co., Limited, 1936. Pp. xii+168. Five Shillings Net.

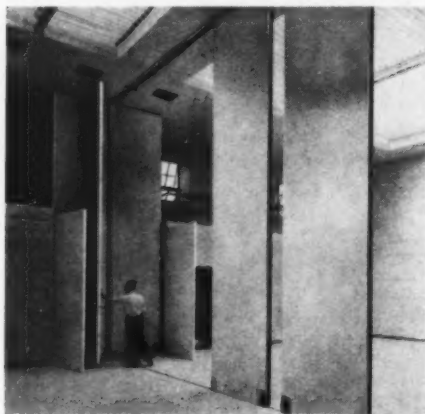
Symposium on types of examinations and their validity as used in England. Prepared by eight eminent British educationists. One of the series of the International Institute Examinations Enquiry. Recommended for college libraries.

a.c.f.

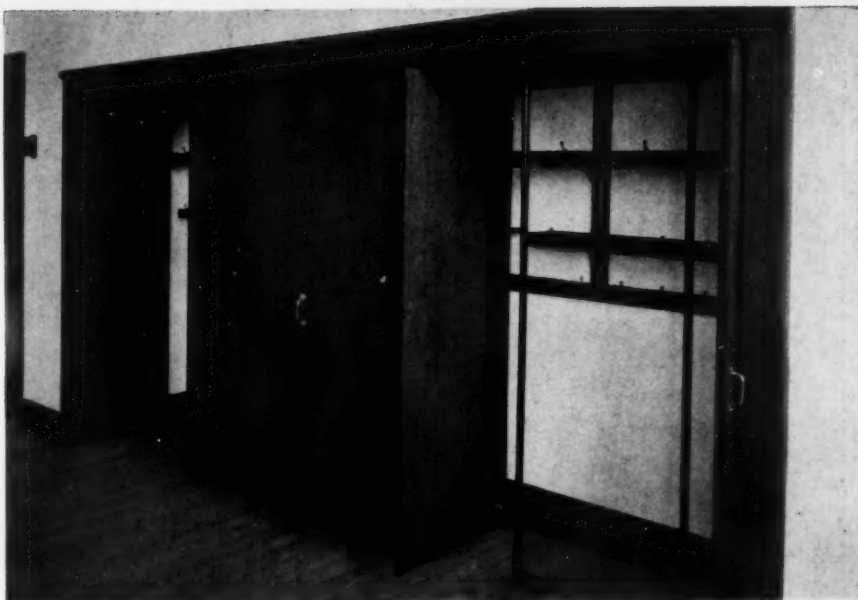
FAIRHURST SCHOOL WARDROBES

AND FOLDING WALLS

Gymnasium, Yale University. Architect, John Russell Pope.



Also A.C.F. Fairhurst folding walls. Lock rigidly into place. May be furnished with blackboards and continuous chalk rail



Fairhurst Wardrobes care for more pupils than do other wardrobes of equal dimensions. All parts subject to stress are amply rugged. In the open position the doors are entirely out of the way at the ends of each compartment. The doors pivot, there are no rollers or wheels, no track or slots on the floor. The operation is simple, smooth, and quiet. The interior arrangement remains unchanged, and aisles and interiors are free from obstructions whether the doors are opened or closed. Sagging of floors does not prevent operation of doors in any way. All wardrobes furnished complete in wood or metal, including hooks and hangers.

AMERICAN CAR AND FOUNDRY COMPANY
30 CHURCH ST., NEW YORK, N. Y. • PHONE CORTLANDT 7-8100

BUY ON MERIT

and compare with any

- Sound Quality
- Volume
- Picture Quality
- Mechanical Precision
- Mechanical Action



The first and only ball bearing projector and sound head built in one unit—no attachments.

Large or Small auditorium 35 mm Standard Film.

See it—Hear it—FREE DEMONSTRATION

Sold to schools on an easy payment plan in 19 payments—19 months—no interest—no carrying charges—no year guarantee.

Write for complete information.

Holmes Projector Company

Manufacturers of 16 mm and 35 mm Projectors
1814 N. Orchard St. CHICAGO

HOLMES
Educator Projector
Quality with Durability

PROTECT THE YOUNG LIVES AND PROPERTY ENTRUSTED TO YOUR CARE



more than
4 SCHOOL HOUSES
per day
DESTROYED by FIRE
last year in the
U. S. A.

Absolute protection of young lives and property is provided by the Holtzer-Cabot Auxiliary System. This alarm, when sounded, instantly calls the City Fire Department because school emergencies require the aid and equipment of trained men. Authorized persons may, however, sound drill alarm without summoning the City Fire Department or sending false alarms; thus forming the habit of leaving the building in an orderly manner so that when a fire actually occurs the children do not know the difference until they are in the street and see the apparatus arrive. Most cases of injury in school fires are due to confusion in leaving the building in a disorderly manner and not by the fire.

Holtzer-Cabot Engineers are at your service

WRITE, WIRE OR TELEPHONE

THE HOLTZER-CABOT ELECTRIC COMPANY

125 AMORY STREET, BOSTON, MASS.

Offices in all principal cities

PIONEERS IN SCHOOL SIGNALING SYSTEMS

The Ideal Portable Chair

QUIET IN OPERATION—
COMFORTABLE IN USE—
ECONOMICAL IN COST!



CLARIN MFG. CO.

4640 WEST HARRISON ST., CHICAGO, ILL.

Replace Worn Out Shades With Draper SIGHT SAVING Shades



Draper Adjustable School Room Shades keep the glare of the sun OUT, but let *all* of the light IN. The patented Draper pulley bracket allows easy shade removal for cleaning.

Address Dept. NS for details
and samples of Dratex Fabric

LUTHER O. DRAPER SHADE CO.

SPICELAND

Dept. NS

INDIAN

PSYCHOLOGY. By Glenn DeVere Higginson. New York: The Macmillan Company, 1936. Pp. xiii+646. \$2.90.

Functional approach to the field of psychology in a much more readable and consistent style than is typical of psychological texts. College level and professional libraries.

FREEDOM, FAREWELL! By Phyllis Bentley. New York: The Macmillan Company, 1936. Pp. viii+484. \$2.50.

Rome lives again vividly in this romance of the passing of the republic. One of the most fascinating presentations of a part of history that may be repeating itself today. The story of the useless and fatal attempts to restore liberty through dictatorship and the final recognition that dead men do not always die. An unusual collateral reading for second-year Latin students.

THE ECONOMIC ABILITY OF THE STATES TO FINANCE PUBLIC SCHOOLS. By Leslie L. Chism. Teachers College, Columbia University, Contributions to Education, No. 669. New York: Bureau of Publications, Teachers College, Columbia University, 1936. Pp. vi+169. \$1.85.

Decidedly interesting attack upon the problem of educational equality measured in terms of expenditures, supplementing earlier studies by Norton and Mort. Attempt is made to determine ability by applying the model tax plan to each state and then computing possible revenue. If the underlying assumptions are accepted as fully valid, the terminal conclusions reinforce the contentions of the earlier studies for equalization through federal subvention. However, there are many other factors!

HANDBOOK ON CHARACTER EDUCATION. By R. L. Hunt. Mitchell, S. D.: Educator Supply Company, 1936. Pp. 162. \$1.33.

A superintendent of schools writes for other members of the profession a practical handbook out of his practical experience. Simple, concrete and direct. Should be of considerable value to administrators, particularly in smaller systems.

SOUTHERN REGIONS OF THE UNITED STATES. By Howard W. Odum. Chapel Hill: University of North Carolina Press, 1936. 600 Maps, Charts and Tables. Pp. xi+664. \$4.

Unusually comprehensive and skillful presentation of our Southern regional culture. Comparable in quality and scope to the Mississippi River regional study produced last year by the Natural Resources Committee. It shows in dramatic form by aid of significant charts and maps the current conditions and the potentialities of an important region. Geographic and cultural factors are brought together in a form to show the cultural possibilities under certain conditions. Realistic, fair and of terrific significance to any real understanding of this region.

Just Off the Press

THE CONSTITUTION OF THE UNITED STATES. With Tree Planting Instructions by the American Tree Association. Washington, D. C.: The American Tree Association, 1936. Pp. 32. (Paper cover).

THE TEACHING OF NATURE STUDY AND THE BIOLOGICAL SCIENCES. By Harrington Wells. Boston: The Christopher Publishing House, 1936. Pp. 333. \$4.

MODERN-LIFE SPELLER. By Fred C. Ayer, E. E. Oberholtzer, and Clifford Woody. Yonkers: World Book Company, 1936. BOOK ONE, for Grades Two, Three and Four. Pp. xvi+128. Illustrated. \$0.48. Cloth. BOOK TWO, for Grades Five and Six. Pp. xviii+106. Illustrated. \$0.48. Cloth. BOOK THREE, for Grades Seven and Eight. Pp. xviii+106. Illustrated. \$0.48. Cloth.

PHYSICAL EDUCATION ACHIEVEMENT SCALES. For Boys in Secondary Schools. By Frederick W. Cozens, Martin H. Trieb, and N. P. Neilson. New York: A. S. Barnes and Company, Inc., 1936. Pp. vi+155. \$1.60.

SENTENCE PARAGRAPH THEME. A College Text in Basic Composition Principles. By John B. Opdycke. New York: Thomas Y. Crowell Company, 1936. Pp. xvii+429. \$2.50.

